

Emergency General Surgery

Institution: Vanderbilt University Medical Center

Duration: 7 weeks

Supervising Physician: Oliver Gunter

Contact Information: 615-347-7253

Year of Training: PGY-4

Educational Objectives:

The Emergency General Surgery (EGS) service is comprised of faculty in the Department of Surgery, residents at the PGY-5, PGY-4, PGY-2, and PGY-1 levels, as well as dedicated Nurse Practitioners. The EGS service evaluates nearly 1,200 patients each year, and serves as the primary consult service for acute general surgical diseases from within Vanderbilt University Medical Center as well as surrounding communities. The primary mission of the EGS service is to provide timely surgical assessment and operative management of the patient with an acute general surgical problem. Core competencies as defined by the ACGME form the basis of resident evaluations.

Patient Care and Procedural Skills:

- ✓ The PGY-4 should be able to appreciate a patient with an acute abdomen. The ability to coordinate the EBM work-up, and perform an exploratory laparotomy with a plan to handle any possible abdominal catastrophe.
- ✓ PGY-4 residents will continue to develop surgical skills while on the EGS rotation. At this level, attention should be paid to nuances of the operation as a whole, i.e. indications and alternatives, exposure techniques, conduct of the operation, communication with OR and perioperative staff etc.
- ✓ Learning to work with an assistant who is less experienced is an important milestone of the senior resident years. At the discretion of the faculty, the PGY-4 resident will frequently take junior residents through appropriate level cases (e.g. appendectomy, inguinal hernia, and cholecystectomy). There are certain cases that are not appropriate for this model, and optimal patient care should supersede other considerations (e.g. a MICU patient in septic shock with bowel perforation or ischemia is a senior level case).
- ✓ Operations/Procedures included in the SCORE curriculum likely to be encountered by the EGS PGY-4 include:
 - Diagnostic Laparoscopy
 - Exploratory Laparotomy
 - Open drainage of abdominal abscess
 - Incarcerated or strangulated hernias
 - Open and laparoscopic cholecystectomy
 - Open and laparoscopic appendectomy
 - Laparoscopic CBD exploration
 - Partial and subtotal colectomy
 - Muscle and lymph node biopsies
 - Debridement for necrotizing infections
 - Pancreatic debridement
 - Pseudocyst drainage procedures
 - Open and percutaneous tracheostomy
 - Open, laparoscopic and percutaneous gastrostomy
 - Repair of duodenal perforation
 - Partial gastrectomy
 - Enterolysis
 - Enterectomy
 - Ileostomy
 - Colostomy

Medical Knowledge:

- ✓ An opportunity exists during this rotation for the PGY-4 to fill any knowledge gaps with the goal of excelling on the general surgery qualifying and certifying examinations. The PGY-4 is also afforded the opportunity to teach

junior residents, particularly in the first half of the academic year. Complex cases and decision-making may prompt literature search for review articles on a variety of relevant topics.

- ✓ Demonstrate knowledge in a broad variety of general surgical areas focusing in emergent surgical conditions
- ✓ Ability to take a junior resident through an appropriate level case (ie, appendectomy / cholecystectomy)
- ✓ Ability to manage severe necrotizing pancreatitis operative and ICU
- ✓ Ability to manage severe necrotizing soft tissue infections operative and ICU
- ✓ Ability to perform emergent / urgent abdominal celiotomy for gastric, small bowel or colonic disease (ie. acute diverticulitis)
- ✓ Ability to discuss with the patient / family operative risk in an emergent operative scenario (ie. acute abdomen)
- ✓ Ability to discuss with patient / family end of life issues in the setting of futile care
- ✓ Ability to manage complex abdominal wall surgical problems

For the PGY-4 year grouping, diseases and conditions which may be encountered on the EGS rotation include:

- Choledocholithiasis
- Biliary Pancreatitis
- Acalculous Cholecystitis and Biliary Dyskinesia
- Iatrogenic Bile Duct Injury
- Small Bowel Obstruction and Ileus
- Acute Mesenteric Ischemia: Arterial, Venous, and Nonocclusive
- Lower Gastrointestinal Bleeding
- Diverticular Bleeding
- Diverticular Fistulae
- Colonic Polyps
- Colonic Cancer
- Gallstone Ileus
- Gallbladder Polyps
- Mesenteric Cyst
- Miscellaneous Hernias
- Hepatic Abscess
- Mallory-Weiss Syndrome
- Peptic Ulcer Disease with Bleeding
- Peptic Ulcer Disease with Perforation
- Peptic Ulcer with Obstruction
- Gastric Ulcer
- Stress Gastritis
- Volvulus
- Appendiceal Neoplasms
- Antibiotic-Induced Colitis
- Meckel's Diverticulum
- Intussusception
- Malrotation
- Pneumatosis
- Addisonian Crisis
- Incidental Ovarian Mass-Cyst
- Cervical Lymphadenopathy
- Necrotizing Fasciitis
- Gastrointestinal Failure
- Hepatic Failure
- Renal Failure
- Coagulopathy
- Neurologic Dysfunction
- Endocrine Dysfunction

- ✓ One of the most effective ways to retain knowledge while at the same time improving the care of your surgical patients is to read about the diseases and conditions faced by patients as you encounter them.

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.

- ✓ A good technique to achieve this objective is to review evidence-based guidelines (e.g. Cochrane Reviews: <http://www2.cochrane.org/reviews/>), as well as critical reading of relevant articles in the surgical literature. Self-evaluation as it relates to patient care is best performed in real-time by seeking feedback and discussion from senior residents and faculty (i.e. *What could I have done differently?*).
- ✓ 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) to learn the principles of breast surgery during the rotation.
- ✓ Participate in the education of patients, families, students, residents, and other health professionals.
- ✓ Incorporate formative evaluation feedback into daily practice.

Interpersonal and Communication Skills

Residents must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

- ✓ As the consulting surgeon, he/ she should have developed the necessary skills to give an EBM medical opinion to another surgical or non-surgical colleague about a patient. He / she should be able to take a junior resident through an appropriate level case.
- ✓ Residents are expected to conduct themselves in a courteous and professional manner when interacting with patients, families and nursing staff. Good communication is critical to patient care, particularly in the emergency setting. Examples of specific elements which are of value throughout surgical training and practice include:
 - Discussion of risk/benefit/nature of the operation with patients and families in the setting of informed consent.
 - Communication with the surgical team. While a Time-out is performed before every invasive procedure or operation, the communication ideally begins much sooner (i.e. with anesthesia re: anticipated need for antibiotics, blood products, etc, with scrub/circulating nurses regarding nature of the operation, needed equipment/suture etc).
 - Transition of patient care, i.e. sign out
 - Communication with consultants and nursing staff
 - End-of-life discussions
- ✓ 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 are expected to demonstrate:

- ✓ 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

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

- ✓ 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:

- ✓ Have all information needed to run morning report, try to find teachable moments for junior residents of all levels and educate.
- ✓ Be ready to function as Chief Resident in their absence.
- ✓ Primary surgeon on all EGS or elective cases as directed by the Chief resident. Frequently will function as first assistant to a junior resident on prototypical cases (lap chole, lap appy, skin/soft tissue, laparotomy).
- ✓ May function as first for chief resident or attending
- ✓ assign tasks to juniors, delegating appropriately as directed or expected by chief resident
- ✓ If documenting notes, please ensure that they include appropriate detail.
- ✓ Supervise junior residents and communicate any delegation of responsibility.
- ✓ Discuss any system issues with attending or Dr. Gunter ASAP
- ✓ Engage EGS faculty in decisions regarding other surgical subspecialty consultation.

Description of Didactic Experiences:

Attend all scheduled education and conferences while on rotation. Sign-out and communication the most important parts of an EGS day, the morning report system allows for patient sign-out, case assignment, debate, and time for instruction are critical with restricted work hours to ensure appropriate continuity of care. In order to provide additional educational benefit, it is expected that all members of the team be prepared to discuss patients, physiology, and surgical options, appropriate to his/her level of experience. The EGS morning report occurs every morning at 0700 except during M & M and grand rounds. On these days the morning report will occur after these educational activities.

Evaluation Process:

Faculty and senior residents will evaluate the performance of each resident using these goals and objectives. Each resident on the service will evaluate the rotation, the service, faculty and any senior residents also on the rotation.