

Emergency General Surgery

Institution: Vanderbilt University Medical Center

Duration: 4 weeks

Supervising Physician:

Contact Information:

Year of Training: PGY-1

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

- ✓ For PGY-1 residents on the EGS service, this will largely take place in the context of perioperative care with the support and guidance of senior residents and faculty. While the PGY-2 resident functions as the main consult resident, PGY-1 residents will at times have the opportunity to evaluate consults. The PGY-1 should also learn to interpret imaging studies such as plain radiographs, ultrasound, and CT scan of the abdomen. Morning report provides a forum to discuss new patients and review imaging studies with faculty and other residents.
- ✓ Operations/Procedures included in the SCORE curriculum likely to be encountered by the EGS PGY-1 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

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Medical Knowledge

- ✓ For the PGY-1 year grouping, diseases and conditions which may be encountered on the EGS rotation include:
 - Inguinal Hernia
 - Femoral Hernia
 - Ventral Hernia
 - Umbilical Hernia
 - Jaundice
 - Cholangitis
 - Acute Cholecystitis
 - Chronic Cholecystitis

- Upper Gastrointestinal Bleeding
- Large Bowel Obstruction
- Acute Appendicitis
- Diverticulitis
- Hemorrhoids
- Anal Fissure
- Anorectal Abscess and Fistulae
- Pilonidal Cyst and Sinus
- Venous Thrombosis-Embolism
- Acute Abdominal Pain
- Intra-Abdominal Abscess
- Rectus Sheath Hematoma
- Duodenal Ulcer
- Ectopic Pregnancy
- Pelvic Inflammatory Disease
- Management of Acute Pain
- Epidermal Cyst
- Hidradenitis
- Cellulitis
- Wound Infection
- Hypovolemic Shock
- Septic Shock
- Cardiogenic Shock
- Neurogenic Shock
- Respiratory Failure
- Cardiac Failure
- Derangements of Electrolytes and Acid Base
- Anaphylaxis
- Pneumonia-Hospital Acquired
- Pneumothorax
- Hemothorax
- Pleural Effusion – Empyema

- ✓ 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

- ✓ A good technique to achieve this objective is to review evidence-based guidelines (e.g. Cochrane 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 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

- ✓ 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.

Technical Skills

PGY-1 residents will learn essential clinical skills in the evaluation and treatment of EGS patients.

- ✓ Time spent in the operating room in a critical part of training, regardless of whether or not one is doing the operation. The opportunity to master use of a 30 degree laparoscope (using right or left hands) while learning

the steps and anatomy of an operation should not be overlooked. Knot tying, suturing, and learning to function as an effective first or 2nd assistant are other goals of the rotation.

- ✓ Operations/Procedures grouped by SCORE for the PGY-1 year (and likely to be encountered on the EGS rotation) include:
 - Open Repair of Inguinal Hernia
 - Open Repair of Umbilical Hernia
 - Percutaneous Endoscopic Gastrostomy
 - Laparoscopic Appendectomy
 - Laparoscopic Cholecystectomy
 - Drainage of Anorectal Abscess
 - Proctoscopy
 - Excisional and Incisional Biopsy of Skin/Soft Tissue Lesions
 - Incision, Drainage, Debridement for Soft Tissue Infections
 - Chest Tube Placement
- ✓ Other skills will include management of complex wounds with a variety of dressing change techniques including negative-pressure wound therapy.

Description of Clinical Experiences:

Specific daily expectations include

- ✓ Rounding on assigned patients as designated by PGY-4/5 residents on service.
- ✓ Run the list with the nurse practitioners on service to assign tasks throughout the work day
- ✓ Write progress notes for all patients on service, please complete these prior to noon, make sure they are sent to the appropriate attending (either full-time faculty or clinical instructor, when in doubt, ask!)
- ✓ See consults and report to the team as soon as possible to determine urgency and plan. Write the consult notes meeting requirements for Level 3 inpatient encounter (<https://emuniversity.com/Page4.html>)
- ✓ See patients in clinic, write appropriately leveled notes, and discuss with senior residents, nurse practitioners, and/or attending (default is Dr. Gunter unless otherwise assigned). Clinic patients start appointments at 12:30 on Thursdays, please ask Tammy or Angie (clinic nurses) for guidance as needed.
- ✓ Hot Clinic patients are same-day consults to the clinic usually for skin and soft tissue infection issues, please respond to pages ASAP from clinic nurses, evaluate patient, discuss with senior resident or attending.

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.

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.