

Trauma

Institution: Vanderbilt University Medical Center

Duration: 6 weeks

Supervising Physician: Oscar Guillaumondegui

Contact Information: 615-480-1149 (24h/7d)

Year of Training: PGY-4

Educational Objectives:

Introduction:

Vanderbilt University Hospital provides trauma care for 65,000 square miles. The Division of Trauma at Vanderbilt University Hospital handles over 4,000 acute trauma admissions annually. Essential for the quality of trauma care provided by Vanderbilt University Hospital are its facilities. These include a 20-bed burn unit, a 31 bed integrated Acute and Sub Acute care unit, which contains a 14 bed ICU, a 7 bed Acute Admission Area and a 10 bed Sub-Acute unit, and LifeFlight, an active air medical transport program. The Trauma Units' unique geography allows close integration and management of patient progress from admission to discharge. LifeFlight provides rapid access to the tertiary care facilities of the Trauma Center for all patients within a 140-mile radius of Nashville.

With over a 3 decades of active service, the LifeFlight helicopters make over 2000 flights annually. LifeFlight and the Stallworth Rehabilitation Center allow patients to remain within the Vanderbilt system from the time of injury until their return to work. The trauma program at Vanderbilt is unique in that surgical residents gain exposure to the problems of both urban and rural trauma care. This comprehensive approach to trauma care and surgical critical care provides powerful research and educational opportunities for residents interested in a career in trauma surgery or surgical critical care. In addition to the active clinical program, the division supports injury prevention, ongoing research opportunities, and continuing medical education programs for Advanced Trauma Life Support and Pediatric Advanced Life Support.

Patient care and procedural skills:

Emergency Department

- ✓ The PGY IV will be able to conduct and coordinate a multidisciplinary resuscitative effort.
- ✓ The PGY IV is principally responsible for orchestrating and guiding resuscitation & evaluation, rather than for procedures.
- ✓ Leadership and decision making skills are emphasized.

Operating Room

- ✓ The PGY IV will, under the supervision of the attending surgeon, participate actively in the surgical management of trauma patients.
- ✓ While technical skills are taught and refined, the major focus is on intraoperative analysis and management plan formation.
- ✓ Independent thinking, data processing and decision making skills are emphasized.
- ✓ Advanced technical skills are acquired - and refined.

Intensive care unit

- ✓ Under the supervision of the attending surgeon and/Critical care fellow, the PGY IV will guide and oversee the resuscitation of critically ill trauma patients in the intensive care unit.
- ✓ PGY IV will supervise junior residents in many bedside procedures or perform the procedures independently with attending determined oversight.

Stepdown/Regular floor

- ✓ The PGY IV will formulate management plans with the attending surgeon and Trauma ACNP to facilitate the convalescence of injured patients.

Post discharge

- ✓ The PGY IV will develop understanding of post injury recovery and return to community life by participating in weekly trauma resident clinic. They participate in this clinic under the supervision of the Trauma Attending
- ✓ The major focus for the PGY IV on the Trauma rotation is on leadership and decision making skills rather than technical exercises. The PGY IV has opportunity to reinforce operative skills while on the rotation

Medical Knowledge:

- ✓ Management of trauma resuscitations
- ✓ Management of multisystem injured patients

- ✓ Demonstration of trauma laparotomy including packing, vascular control, and/or enteric content control
- ✓ Demonstration of open abdomen technique
- ✓ Independently performs gastrotomy, splenectomy, enterectomy with anastomosis, colectomy with colostomy and/or anastomosis, nasojejunal enteric tube placement, central/arterial/intraosseous line placements, bronchoscopy, tracheostomy, esophagogastroduodenoscopy, and colonoscopy
- ✓ Understands current-era management of rectal injuries including proximal diversion
- ✓ Demonstrates knowledge of indications for emergency department and/or operative thoracotomy
- ✓ Demonstrates knowledge of and indications for Retrograde endovascular balloon occlusion of the aorta
- ✓ Demonstrates knowledge on appropriate resuscitation for trauma patients pre-hospital and in hospital resuscitations

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, junior residents, and/or Trauma ACNPs about the procedures performed on this rotation when qualified to do so by hospital and program policy.
- ✓ Expected to establish expectations, roles, and responsibilities for junior residents, clerkship students and senior level students rotating on service.
- ✓ Expected to provide routine educational activities to junior residents and students while on service (such as teaching on rounds, chalk-talks, knot-tying, etc.)
- ✓ Expected to provide timely feedback and assessments to the program director, clerkship director and medical student supervisor as requested

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.

- ✓ 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.
- ✓ The PGY IV will participate with the attending surgeon, Trauma ACNPs, and/or consultants in family conferences and interdisciplinary educational conferences.
- ✓ To provide continuity of care, assess outcomes, and gain experience in patient management, all R4s on trauma when assigned to the day shift will attend outpatient clinic one half-day per week.

Description of Clinical Experiences:

Specific daily responsibilities of the PGY-4 Resident include:

- ✓ Ensuring supervision of all PGY-2 Residents, PGY-1 Interns, medical students, and student shadows
- ✓ Presentation of all new patients during AM daily check-out conference, shift-change, and team rounds with ability to communicate differential and choice in decision-making
- ✓ Complete shift-situational awareness of all (i.e. 100%) Trauma consultations, operations, and admissions
- ✓ Timely communication and posting of all Level II or III operating room cases
- ✓ Ensuring timely communication of all new Level III Trauma consultations to Trauma Fellow, and/or Trauma Attending, especially near shift-change
- ✓ Ensuring timely communication, documentation, and order-entry occurs for all new admissions with patient care hand-off to appropriate ACNP provider in ICU (T1), Stepdown (T2), or ward service (T3)
- ✓ Participation and/or procedural leadership for all Trauma procedures and operations with appropriate supervision by Trauma Fellow, and/or Trauma Attending
- ✓ Trauma Team Leader (TTL) role for all Level I/II alerts (initial assessment and secondary survey for trauma, per Advanced Trauma Life Support guidelines) in collaboration with Trauma Attending/Fellow, and ED team, ensuring shared mental model of communication with control of noise (e.g., one-voice) and personnel (e.g., only participants should be dressed), with optimal response time prior to patient arrival
- ✓ Wearing personal protective equipment (PPE) during all Trauma Resuscitations, bedside procedures, and operating room cases; Ownership of all sharp-disposals
- ✓ Shift-dependent presence and participation in weekly trauma clinic, daily AM checkout conference, shift-change patient care hand-off, and AM rounds
- ✓ Ensuring trauma team (e.g., ACNP, PGY-2) is keeping individual patient summaries up-to-date (history, injury, traumagram and imaging results, procedures, consultations with recommendations, dispositions)
- ✓ Ensuring consultations by trauma team (e.g., ACNP, PGY-2) are initiated immediately, with ideal method of verbal and/or face-face communication
- ✓ Ensuring order execution by trauma team (e.g., ACNP, PGY-2)
- ✓ Communication of any and all uncertainty in patient-care plans to ACNP, Fellow, and/or Trauma Attending

Description of Didactic Experiences:

- ✓ Trauma morning report. This will be a 1 hour daily conference that reviews all trauma admissions, acute issues for patients on service. Education will be provided by attending faculty, fellows and senior residents. Occurs daily at 0700 in the 10North Conference Room
- ✓ Monthly Trauma Morbidity and mortality for the Trauma Division. Occurs 3rd Wednesday of the month at 1200 in the trauma division conference room
- ✓ Monthly Trauma morbidity and mortality for the Department of Surgery. Occurs the 4th Wednesday of the month at 0630 in Light Hall

- ✓ Weekly Trauma Video resuscitation review with Trauma, Emergency Medicine and pre-hospital personnel.
Occurs at 1100 weekly in Oxford House

Evaluation Process:

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