

Iowa Methodist Medical Center  
Department of Surgery Education  
Resident Rotation Description

Rotation: Trauma Surgery Service, PGY-1

General Information:

1. Postgraduate year: PGY-1
2. Rotation Length: Two to three months
3. Service Director: James Swegle, M.D.
4. Attending Staff: Sheryl Sahr, M.D.  
Richard Sidwell M.D.  
James Swegle, M.D.  
Peter Tonui, MD

Orientation:

The junior level resident beginning on the Trauma Surgery Service should meet with his/her counterpart on the day prior to the change of residents. The incoming resident should meet with the service director, James Swegle, M.D., prior to the rotation to review goals and objectives for the PGY-1 level resident.

Recommended Reading List:

1. Selected trauma and critical care specific chapters from the major general surgery textbooks:
  - a. Sabiston "Textbook of Surgery" (current edition)
  - b. Schwartz "Principles of Surgery" (current edition)
  - c. Cameron "Current Surgical Therapy" (current edition)
  - d. ACS Surgery (current hardcover edition and online updates)
2. Marino "The ICU Book"
3. Mattox "Trauma"
4. Mattox "Top Knife"
5. SCORE (Surgical Council on Resident Education) Curriculum Portal

Call Schedule:

Surgery Call Schedule

Conference Schedule:

1. IMMC Surgery conference
2. Multi-disciplinary ICU rounds, 8:00 am, Monday, Wednesday, Friday
3. Trauma Video Conference, 4:00 pm Tuesday

General Objectives and Description:

The PGY-1 resident on the trauma service learns the evaluation and management of the injured patient. This included the initial trauma resuscitation and stabilization, operative interventions, non-operative management, critical care, and recovery. Additionally, the resident learns about the surgeon's role in the multidisciplinary care of the injured person. The resident is instructed by neurosurgical and orthopedic consultants to learn appropriate care of injuries within those domains. The resident is exposed to the organization of the statewide trauma system. Finally, the resident learns about prevention of injury.

Cognitive Objectives of the Rotation:

The PGY-1 resident should develop a BROAD understanding (able to care for all aspects of disease and provide comprehensive management) of the following diseases and conditions:

1. Blunt trauma
2. Chest injuries
  - a. Rib fractures
  - b. Sternal fractures
  - c. Flail chest
  - d. Pneumothorax
  - e. Hemothorax
  - f. Pulmonary contusion
  - g. Pulmonary laceration
  - h. Myocardial contusion
3. Pediatric Trauma
4. Geriatric Trauma
5. Trauma in Pregnancy
6. Shock
  - a. Hypovolemic
  - b. Septic
  - c. Cardiogenic
  - d. Neurogenic
7. Derangements of electrolytes and acid-base
8. Anaphylaxis
9. Pneumonia – hospital acquired

The PGY-1 resident should develop a FOCUSED understanding (able to make the diagnosis, provide initial management/stabilization, but not expected to be able to provide comprehensive management) of the following diseases and conditions:

1. Head injury
  - a. Closed
  - b. Penetrating
2. Orthopedic and spinal injuries
  - a. Spine fracture
  - b. Pelvic fracture
  - c. Extremity fractures
  - d. Dislocations
  - e. Sprains and strains
  - f. Mangle and traumatic amputation
3. Envenomation
  - a. Snakes and lizards
  - b. Spider
  - c. Hymenoptera
  - d. Scorpions
4. Animal and human bites
5. Environmental injuries
  - a. Hypothermia
  - b. Frostbite

#### Technical Skills Objectives for the Rotation:

The PGY-1 resident should achieve a progressive level of skill in assisting and performing the following procedures necessary for the care of the injured or critically ill person:

1. Arterial line placement
2. Central venous line placement
3. Endotracheal intubation
4. Chest tube placement
5. Debridement/suture of major wounds

#### Outpatient Experience:

The resident is expected to attend trauma clinic for follow-up of all trauma patients. Clinic meets on Wednesday afternoon. The resident is expected to document attendance and patient contact.

#### Contact Persons within the Trauma Clinic:

1. Trauma Clinic 281-1541
2. Trauma Surgeon on call 205-3791 (mobile phone)
3. Dr. Sheryl Sahr 234-1701 (pager)
4. Dr. Richard Sidwell 234-1168 (pager)
5. Dr. James Swegle 234-0524 (pager)
6. Dr. Peter Tonui 234-1702 (pager)

#### Evaluation:

At the end of the rotation, the resident will be evaluated by supervising faculty. Personal feedback will be provided and a computer generated evaluation form will be completed. The faculty will evaluate the resident in each of the required six general competency domains. Additional evaluation tools will include senior resident, nursing, and patient evaluations.

## COMPETENCY SPECIFIC GOALS AND OBJECTIVES:

### Patient Care

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Meet the technical skills objectives for the rotation, as detailed above
- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- Gather essential and accurate information about their patients pertinent to their injury
- Make informed decisions about treatment of injury, including non-operative management when appropriate, based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and implement management plans for patients with injury.
- Counsel and educate patients and their families in regard to injury and injury prevention.
- Use information technology to support patient care decisions and patient education.
- Work with health care professionals, including those from other disciplines, to provide patient-focused care.

### Medical Knowledge

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and epidemiological sciences and the application of this knowledge to patient care. Residents are expected to:

- Meet the cognitive objectives for the rotation, as detailed above
- Demonstrate and investigatory and analytic thinking approach to clinical situations in patients with injuries.
- Know and apply the basic sciences appropriate to the management of patients with injuries.

### Practice-Based Learning and Improvement

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence about patients with injury.
- Obtain and use information about injured patients.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies of injured patients.
- Use information technology to manage information, access on-line medical information, and support their education.
- Facilitate the learning of students and other health care professionals related to injury.

### Interpersonal and Communication Skills

Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange with patients, their patients families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients.
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills in assessing injury and critical care.
- Work effectively with others as a member of the trauma team.

### Professionalism

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.

### Systems-Based Practice

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide optimal care of injured and critically ill patients. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing the system complexities.
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health related to injury and injury prevention and to know how these activities can affect system performance.
- Understand the Iowa Trauma System and the role that the surgeon and the hospital play to provide optimal care of the injured person.