

## **R4 AND R5 GOALS AND OBJECTIVES**

Loma Linda ACS Service will provide a learning environment for the care and management of acute care surgery and trauma patients. Surgical basic science, including fluid and electrolytes, wound healing, nutrition and postoperative management, will be emphasized. Clinically, residents will assess the patients in the Emergency Department and on the floor for acute surgical problems and injuries, develop clinical judgment on managing these issues, and learn operative skills to address the problem. Careful postoperative and post-trauma care and follow up will be emphasized. Residents will develop cognitive and technical skills in dealing with complex, acutely ill patients.

### **Medical Knowledge**

<https://www.east.org/education/practice-management-guidelines>

MATTOX textbook located in resident call room

1. Initial resuscitation of the acutely injured patient
2. Application of massive transfusion protocols
3. Direct and control mass casualty events
4. Understand indications for resuscitative thoracotomy and Resuscitative endovascular balloon occlusion of the aorta
5. Manage severe closed head injuries including the operative and non-operative management
6. Resuscitation and management of spinal cord injuries
7. Operative and non-operative management of blunt and penetrating injuries to the neck, chest, heart, mediastinum, abdomen, pelvis, and upper arms and legs
8. Approach to major vascular control in the chest, abdomen, and pelvis
9. Discuss and demonstrate damage control strategies
10. Demonstrate major vascular control in the neck, chest, abdomen, and pelvis
11. Indications and approach for damage control orthopaedics including external fixation devices
12. Indications and approach for angiography and embolization
13. Discuss injury prevention and intervention
14. Discuss pre-hospital systems and care
15. Evaluation and management of acutely ill surgical patients
16. Acute preoperative workup and optimization of the high risk surgical patient
17. Indications for damage control strategies in emergency general surgery
18. Diagnosis and treatment of severe soft tissue infections
19. Diagnosis and treatment of severe peritonitis
20. Management of complex hernias
21. Management of fistulas
22. Management of severe pancreatitis
23. Management of complex biliary tract disease

24. Management of acute esophageal, gastric, small bowel and large bowel disease including both operative and non-operative management
25. Role of nutrition surgical patients
26. Discuss and maintain up to date knowledge of trauma and emergency general surgery
27. Mock Orals

**Procedural:**

1. Operative cases: Progressive autonomy (Zwisch model: Show and Tell; Active Help; Passive Help; Supervision only)
2. Take ASSET course during residency
3. Airway management
  - a. Laryngoscopy
  - b. Tracheal intubation
4. Circulatory/Hemodynamic
  - a. Invasive monitoring
  - b. Non-invasive monitoring
  - c. Hemodynamic ultrasound
  - d. Rapid infusion devices
5. Renal
  - a. Peritoneal dialysis
6. Gastrointestinal
  - a. GI intubation
  - b. Endoscopic techniques
    - i. Upper: diagnostic/therapeutic
    - ii. Lower: diagnostic/therapeutic
  - c. Enteral feeding
7. Hematologic and hemostasis
  - a. Autotransfusion
  - b. Reversal of coagulopathy
8. Infectious disease
  - a. Isolation technique
  - b. Drug therapy with/without organ failure
9. Nutritional
  - a. Parenteral & enteral
  - b. Assessing metabolism and nutrition
10. Other
  - a. IVC filter placement
  - b. Vessel cannulation for partial cardiac bypass
  - c. Total hepatic isolation
  - d. Vascular shunts

- e. Ultrasound of the abdomen & pericardium (FAST)
- f. Ultrasound for line placement
- g. Invasive rewarming techniques

### **Patient Care**

Coordinate efficient transfer of the surgical and trauma patients from the emergency department to the operating room

Learn to interact professionally and productively with consulting physicians and communicating with those services

Develop the skills necessary to lead the evaluation of a trauma or acutely ill surgical patient in the emergency department setting

After completing a thorough history and physical examination, develop competent assessment and plans for patient care

Accurately interpret different diagnostic modalities including: x-rays, ultrasounds, CT scans, contrast studies and MRIs and apply appropriate interventions

Discuss treatment options, risks and potential complication of patient with general surgical issues

Become proficient in the assistant surgeon's role in the performance of general surgical and laparoscopic procedures

Demonstrate skills in advanced surgical techniques, including:

Gastrointestinal anastomosis, entrectomy, colectomy, ileostomy, colostomy, splenectomy, hepatorraphy

Vascular trauma exposure of the neck, chest, abdomen and extremities

Demonstrate knowledge in steps and conduct during major surgical procedures

Have an understanding of when it is not appropriate to operate

Have a clear indication when to adopt non-operative management pathways for the trauma patient and know when to abandon the non-operative management pathway

### **Professionalism**

The resident should be receptive to feedback on performance, attentive to ethical issues and be involved in end-of-life discussions and decisions

Understand the importance of honesty in the doctor-patient relationship and other medical interactions

Treat each patient, regardless of social or other circumstances, with the same degree of respect you would afford to your own family members

Learn how to participate in discussion and become an effective part of rounds, attending staff conference, etc.

Communicate effectively with consulting physicians and ancillary staff

Complete all assigned patient care tasks for which you are responsible or provide complete sign out to the on-call resident

Maintain a presentable appearance that sets the standard for the hospital this includes but is not limited to adequate hygiene and appropriate dress

Assist with families of critically injure/ill patients and guidance of families towards or through difficult decisions.

Demonstrate mentoring and positive role-modeling skills

Take the leading role in directing the weekly educational conferences involving medical students and junior residents.

Provide an appropriate orientation and guide all medical students and junior residents as to their roles and responsibilities during the rotation

### **System-Based Practice**

Understand, review and contribute to the refinement of clinical pathways

Understand the cost implications of medical decision-making

Partner with health care management to facilitate resource efficient utilization of hospital resources

Describe in general terms the benefits of clinical pathway implementation

Develop a cost-effective attitude toward patient management

Make meaningful contributions to the multi-disciplinary approach to management of critically ill surgical patients

Comply with the Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations regarding patient privacy and confidentiality.

### **Practice-Based Learning & Improvement**

Demonstrate the ability to:

Evaluate published literature in critically acclaimed journals and texts

Apply clinical trials data to patient management

Participate in academic and clinical discussions

Accept responsibility for all dimensions of routine patient management on the wards

Apply knowledge of scientific data and best practices to the care of the surgical patient

Facilitate learning of medical students and physician assistant students on the team

Use the LLUMC library and database on-line resources to obtain up to date information and review recent advance in the care of the surgical patient

Demonstrate a consistent pattern of responsible patient care and application of new knowledge to patient management

Demonstrate a command and facility with online educational tools

### **Interpersonal and Communication Skills**

Work as effective team members

Cultivate a culture of mutual respect with members of nursing, support staff, and other specialties

Develop patterns of frequent and accurate communication with team members and attending staff

Gain and appreciation for both verbal and non verbal communication from patients and staff

Demonstrate consistent respectful interactions with members of nursing and support staff

Demonstrate consistent, accurate and timely communication with members of the surgical team

Demonstrate sensitivity and thoughtfulness to patient concerns and anxieties

The resident will demonstrate the ability to provide and request appropriate consultation from other medical specialists.