Surgical Intensive Care Unit

Goals
The goals of the anesthesia residency surgical intensive care unit rotation is to provide a learning environment for the care and management of the critically ill patient, develop clinical judgment on managing trauma patients, postoperative patients, burn patients, and patients who are either awaiting cardiac surgery or who are postoperative from cardiothoracic surgery. Basic sciences; including fluid and electrolyte management, nutrition, ventilator support and postoperative care and follow up will be emphasized during the first year.

Objectives

• Medical Knowledge
  o Utilize basic critical care management in resuscitation of the critically ill patient including basic fluid and electrolyte management and utilization of ACLS protocols
  o Consistently apply basic science principles to common clinical situations
  o Demonstrate ability to interpret radiographic findings, EKG, laboratory data, and intravascular and intra-cranial monitoring systems
  o Diagnose and manage significant wound infection
  o Manage glucose control in diabetic patients
  o Describe different ventilator modes including IMV, PSV, PEEP, assist-control ventilation, permissive hypercapnia and weaning parameters
  o Place and manage arterial lines, central lines, swan catheters
  o Interpret data from hemodynamic monitors including arterial blood gases
  o Be able to describe the mechanism of action of different vasopressors, including dopamine, dobutamine, epinephrine, neosynephrine and their particular indications
  o Define ARDS and how it is diagnosed and managed, including ventilator support
  o Develop proficiency with the different sedation and analgesic protocols including: PCA, epidurals, conscious sedation, paralysis and have an understanding of the indication of each one of these modalities
  o Become proficient with the use of antibiotics and treatment of multi-drug resistant organisms
  o Develop a working understanding of problems common to the critical care setting such as shock, sepsis, and ARDS

• Patient Care
  o Utilize basic techniques in evaluation of the intensive care patient with appropriate history and physical. Be able to prioritize plan of care
  o Analyze the presence of co-morbidity and how this affects care
Review the social and family history and how it impacts the patient throughout their stay in ICU
Maintain open communication with patient family and include family in plan of care
Verbally present a clear and concise plan to the intensive care unit fellow and faculty
Demonstrate proficiency in clinical/technical skills relevant to the management of the patient in a critical care setting
Implement basic principles in pain management including use of PCA, epidural, regional and opiates.

• 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 discussions and become an effective part of rounds, attending staff conference, etc.
  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. Scrubs should be worn only when operating or while on call.
  Assist with families of critically injured/ill patients and guidance of families towards or through difficult decisions.
  Demonstrate mentoring and positive role-modeling skills

• Systems 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 efficient utilization of the hospital’s resources.
  Describe in general terms the benefits of clinical pathway implementation
  Develop a cost-effective attitude toward patient management.
  Develop an appreciation for the benefits of a 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:**
  o 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
  o Accept responsibility for all dimensions of routine patient management on the wards
  o Apply knowledge of scientific data and best practices to the care of the surgical patient
  o Facilitate learning of medical students on the team.
  o Use the library and databases on on-line resources to obtain up to date information and review recent advances in the care of the surgical patient.
  o Demonstrate a consistent pattern of responsible patient care and application of new knowledge to patient management.
  o Demonstrate a command and facility with on line educational tools.

• **Interpersonal & Communication Skills:**
  o Work as effective team members
  o Cultivate a culture of mutual respect with members of nursing and support staff
  o Develop patterns of frequent and accurate communication with team members and attending staff
  o Gain an appreciation for both verbal and non verbal communication from patients and staff
  o Demonstrate consistent respectful interactions with members of nursing and support staff
  o Demonstrate consistent, accurate and timely communication with members of the surgical team
  o Demonstrate sensitivity and thoughtfulness to patients concerns, and anxieties.
  o The resident will demonstrate the ability to provide and request appropriate consultation from other medical specialists.