West Virginia University
SCHOOL OF MEDICINE

Department of Anesthesiology

Clinical Base Year
Surgical Critical Care Medicine Curriculum (SICU)

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Educational Purpose: The purpose of this rotation is to provide residents with the knowledge and skills necessary to care for critically ill patients in the perioperative period. Residents will learn the basic tenets of stabilization of critically ill postoperative and trauma patients and understand the differential diagnosis and appropriate diagnostic work-ups for a wide spectrum of perioperative complications. They will function within a multidisciplinary team to provide care that is timely, appropriate.

Principle Teaching Methods:

A. Supervised direct patient care activities: Resident teams participate in daily management and teaching attending rounds with their supervising attendings. Residents assume primary care for the management and coordination of care for their patients, including performance of any necessary procedures.
B. Didactics: Organized lectures occur on a daily basis.
C. Assigned readings: Residents are expected to complete directed reading based upon their patient census. In addition, there are assigned readings from standard texts to serve as preparation for lectures.

Resident Responsibilities:

I. **Expectations Daily**:
1. Participate in morning and afternoon rounds.
2. **Discuss your patient, problems, and plans with primary services each morning** and check for their plan, etc.
3. **Discuss the patient status and plan with the family each day.**
4. Perform bedside procedures as needed and appropriate.
5. **A procedure note must be written for each procedure.**
6. Assist other team members with procedures, admission, orders, etc
7. Prior to leaving in the afternoon, review and checkout all of your patients, procedures, orders, films to check, etc with the on call person.
8. When post call- **CHECK OUT** thoroughly with the on call resident so that patient care can be continued in your absence.

9. If you are unsure how to do a procedure- ask for help/notify the attending.
10. **All patients in the ICU 48 hours or greater need to have an entry on the ICU summary sheet with key diagnosis and plan.**
11. **Update important events/new diagnosis for your patients each day on the SICU daily patient update list each day.**
12. When rounding, the **"To Do"** list needs to be completed and placed on the nursing bedside folder.

II. **Notes:**

1. Write notes on all your patients. Be sure to have clear **diagnosis** and plan.
2. Please use the ICU note in **Optio** as this is approved to be scanned into the permanent record. Please review all medications, line review and necessity, pulmonary toilet, and PT/OT and confirm appropriate orders are in.
3. If your patient has been in the ICU for more than 3 days is transferring out of the unit, a transfer summary diagnosis, plan and status is required.

III. **On Call:**

1. Admit all new patients, assess them on arrival and develop a plan.
2. Discuss and review each patient with the primary service when the patient arrives. If no representative is available- page him or her. Communication with the primary service is vital.
3. **Contact the attending and review patient and plan.**
4. Write a note detailing history, physical, X-rays, labs, plan and discussion with the Attending.
5. Round on all patients throughout the night- whether you get called or not.
6. Document all changes in patient status, problem, intervention and plan.

IV. Notify SICU Attending and primary service chief of any change in status.

V. After AM rounds, the on-call resident is in charge of delegating the work. The on-call resident should also talk with the social service person to notify them of social issues, family needs, health care surrogates, etc.

VI. Rotation Specific Goals and Objectives

PATIENT CARE

- To be able to admit a patient to the ICU, evaluate current issues and past medical history, establish and execute a plan of care for the patient and current issues
- To be able to identify and implement different resuscitation strategies based on the physiology of the patient
- To be able to evaluate the poly-trauma patient
- To be able to evaluate the acute neurosurgical patient
- To be able to place a Swan-Ganz catheter

- To be able to place arterial catheters
- To be able to place central venous catheters

MEDICAL KNOWLEDGE

- To be able to define shock and give examples of each kind
- To understand fluid resuscitation and ability to evaluate the response to therapy
- To be able to name the vasopressors and ionotropes and to know indications, dose, effects, and adverse effects of each
- To know the risks and benefits of the Swan-Ganz catheter, arterial catheter, and central venous catheter
- To understand indications, time course, and adverse effects of the most commonly used antibiotics
- To understand the basic modes of mechanical ventilation
- To be able to define ARDS
- To be able to define and identify acute renal failure
- To understand the coagulation cascade and treat abnormalities of it
- To understand indications, risks, benefits, and alternatives to blood transfusion

PRACTICE-BASED LEARNING AND IMPROVEMENT

- To be able to critique personal practice outcomes through daily peer presentations and review
- To be able to evaluate complications, causes and outcomes by participating in ICU Morbidity Conference
- To be able to critique and review all ICU mortalities by participating in the ICU Mortality Conference

INTERPERSONAL AND COMMUNICATION SKILLS

- To be able to effectively communicate with the nursing staff
- To be able to effectively communicate with other members of the multi-disciplinary ICU team, such as pharmacists, dieticians, respiratory therapists, etc
- To be able to effectively and compassionately discuss the daily plan of care for each patient to the patient and family
- To participate in end of life family discussions
- To be able to effectively document practice activities

PROFESSIONALISM

- To be able to demonstrate sensitivity to age, gender and culture of patients and other health care professionals

- To display the highest levels of professionalism through verbal and non-verbal conduct and all behavior
- To maintain high standards of ethical behavior

SYSTEMS-BASED PRACTICE

- To demonstrate a knowledge of risk-benefit analysis
- To assist in the development of a health care plan that provides high quality, cost effective patient care
- To be able to recognize the need for a consultant, make appropriate requests, and provide appropriate information to the consultants
- To recognize and understand the role of other health care professionals in the overall care of the patient

Methods of Evaluation

a. Resident Performance

i. Faculty complete web-based (E*Value) electronic resident evaluation forms provided by the Internal Medicine Residency office. The evaluation is competency-based. The evaluation is shared with the resident, is available for on-line review by the resident at their convenience, and is internally reviewed by the residency office. The evaluation is part of the resident file and is incorporated into the semiannual performance review for directed resident feedback.

ii. Residents electronically record completed procedures on the E*Value system. The supervising physician verifies the resident understands the procedure's indications, contraindications, complications and interpretation.

b. Program and Faculty Performance

i. Using the E*value system upon completion of the rotation, residents complete a service evaluation commenting on the faculty, facilities and service experience. Evaluations are reviewed by the program and attending faculty physicians receive anonymous annual copies of aggregate completed evaluations.

CURRICULUM TIMELINE

Approved by Education Committee September 26, 2007