Description of R1 ICU-Critical Care Rotation, IMMC

I. Length of Rotation:

The ICU Pulmonary/Critical Care rotation will be a four week rotation.

II. Division Director: Greg Hicklin, MD

Staff:

Katrina Guest, MD
Angela Collins, MD
Amerlon Enriquez, MD
Ryan Brimeyer, DO
Jason Mohr, DO
Matt Trump, DO

III. Logistics of Rotation:

A. The resident will report to the ICU for orientation on the first day of the service by 6:30 a.m. The assigned supervising resident and attending physician for the month will orient the resident and will provide a list of patients the resident is to follow.

B. The resident will be expected to be available in the ICU to the nurses and staff physicians from 6:30 a.m. to 5:00 p.m. each weekday. This is considered the minimum time the resident will need to be available. On weekends, the resident on call (an R2 or R3) will cover the ICU for a 24 hour period from 6:30 AM to 6:30 AM the following day. First year residents will have no call responsibilities during this rotation.

C. Depending on the workload during the rotation, the resident may need to begin their daily rounds earlier in order to be familiar with the patients prior to staff rounds.

D. Resident will be expected to round one of the two weekend days as arranged with the staff physician and supervising resident.

E. Resident must communicate with the on-call resident both week nights and on weekends to assure proper transfer of patient care occurs. See the Transition of Care Policy for details.

IV. Description of Rotation:

A. The purpose of the rotation is to teach the resident how to properly manage patients who are critically ill. Many of these patients will have co-existing diseases requiring skills associated with general internal medicine. To properly evaluate and treat these patients, the resident will need to perform a complete history and physical examination and order appropriate diagnostic tests. The resident will then need to order and implement appropriate therapies and monitor the patient's response to therapy.

B. The principal teaching method will be bedside teaching. Discussions

will center on the evaluation and treatment of common problems encountered in the ICU. There will also be discussion of more complex cases that will only be seen in a tertiary critical care center. Certain subjects will require a didactic format and others will require independent reading by the resident.

C. The resident will become familiar with diagnosis, treatment and pathophysiology of acute respiratory failure secondary to multiple causes, including, but not limited to ARDS, pneumonia, neuromuscular disease, cardiogenic pulmonary edema and COPD. The resident will also become familiar with stabilization of the patient in shock by identifying and treating the underlying cause.

D. The rotation will allow the resident to learn central line placement, arterial line placement, the basics of mechanical ventilation, and the use of clinical ultrasound at the bedside in the ICU. The resident will also become familiar with the evaluation and management of drug overdose patients.

V. Competency-Specific Goals & 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:

- perform efficient, clinically focused H&P based on patient's presentation
- learn to use family, pre-ICU personnel and outside hospital records as secondary sources in order to obtain patient information
- develop appropriate diagnostic and therapeutic plans in a patient-centered manner
- demonstrate competence in the management of shock and the principles of fluid resuscitation
- develop the skills necessary for basic ventilator management under supervision in caring for patients with acute ventilatory failure
- evaluate patients for indications for procedures and to perform procedures with maximum safety
- develop expertise in the use of basic clinical ultrasound at the bedside

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:

- know the common medical problems seen in an ICU, and engage in case-based learning on a regular basis
- learn how to interpret basic laboratory tests, chest radiographs, and electrocardiograms
- know how to use approved on-line resources in order to obtain the best available evidence when providing patient care

Practice-Based Learning & 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:

- listen to suggestions from non-physician members of health care team
- use electronic resources to conduct real-time searches of the literature in order to answer clinical questions
- demonstrate the ability to learn and improve at the point of care

Interpersonal and Communication Skills

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

- communicate effectively with patients, patients' families, nurses, other health care professionals, peers and attending physicians
- always ask patient and families if they have questions
- always discuss rationale and possible risks of procedures, and know how to obtain informed consent and obtain advanced directives ina compassionate manner
- complete all health care records in a complete, accurate, and timely manner

Professionalism

Residents must demonstrate a commitment to carry out professional responsibilities, adhere to ethical principles, and demonstrate sensitivity in caring for a diverse patient population. Residents are expected to:

- Be respectful and courteous to members of the health care team
- Be respectful of patients' decisions regardless of your personal opinions
- Discuss prognosis honestly, compassionately and accurately with patients and families
- Respect patient confidentiality and remain compliant with HIPPA at all times

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 patients. Residents are expected to:

- Become familiar with guidelines applicable to ICU
- Become familiar with role of social workers, dietitians, respiratory therapists, nursing staff, and the head nurse in ICU
- Avoid or minimize unnecessary testing

VI. Ancillary Educational Materials

A. Residents will review the basic ICU text The ICU Book by Marino.

B. Required reading for the rotation will also include articles provided by the staff as well as appropriate chapters in a general internal medicine textbook.

C. Residents should also access online resources such as UpToDate, www.chestnet.org, www.sccm.org, and www.thoracic.org.

VII. Patient Care Responsibilities

A. The maximum number of patients the resident will follow will be 6. The resident will be responsible for the initial evaluation and daily follow-up of these patients in the unit. The resident will communicate directly with the ICU attending staff.

B. No vacation time will be allowed during the rotation.

C. The resident will be excused from weekly continuity of care clinics. The resident must notify these clinics in advance of this month to assure these clinics have been appropriately canceled.

D. The resident will be responsible for initial history and physical, transfer and discharge summaries and daily progress notes.

E. The resident will be instructed on proper placement of central lines, arterial lines, endotracheal tubes, and other invasive procedures. The resident will provide evidence that they have met direct supervision requirements for these procedures, and/or will be observed by the ICU attending staff physicians before performing them under indirect supervision.

VIII. Evaluation

At the end of the rotation, the resident will be evaluated by the supervising senior resident and faculty. Personal feedback will be provided and an evaluation completed on-line by the supervising faculty. The evaluation will be reviewed and signed by the resident after it has been released by the program director.

The resident will be evaluated by faculty in each of the required six general competency areas as follows:

1. Patient Care:

a. Demonstrate ability to effectively evaluate and manage patients with critical conditions.

b. Demonstrate competence with required procedures encountered during the rotation. Resident competence should be assessed during the month for central venous line placement, arterial line placement, and ET intubation.

2. **Medical Knowledge**: Demonstrate ability to access and critically evaluate current medical information relevant to critical care and demonstrate understanding of any assigned reading materials.

3. **Practice-Based Learning**: Demonstrate ability to identify gaps in knowledge and skills in the care of patients with critical care conditions and demonstrate real-time strategies to address these gaps. Demonstrate ability to teach junior learners when subintern on service.

4. **Interpersonal and Communication Skills**: Demonstrate adequate communication abilities in dealings with patients and families. Demonstrate timely and complete medical records, including admission notes, daily progress notes, procedure notes and

appropriate transfer notes when patients transferred out of critical care unit.

5. **Professionalism**: Demonstrate respectful behavior towards patients and families, colleagues, nurses and other allied health personnel. Always protect patient confidentiality and provide informed consent.

6. **Systems-Based Practice**: Demonstrate an evidence-based, cost-conscious approach to patient care. Collaborate with nursing, social services and other allied health care providers to assure timely, comprehensive care provided, especially regarding timely and appropriate transfer of patients out of the critical care unit.

William J. Yost, MD
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