

Intensive Care Unit/Critical Care

Level: PGY-2

Service: Intensive Care Unit/Critical Care

Length of Rotation: 1 Month

Supervision: PGY-2 → IM Resident → Critical Care Fellow → CCM Attending
All management decisions will be discussed with the supervising fellow and faculty. There is an in house supervising resident that can be called on if necessary for assistance. An attending physician will round daily with the residents and students on the service. Attending coverage for the CCM service is by Pulmonary Medicine.

Duty Hours:

- 1) On Call Responsibility
- 2) The residents on Critical Care Medicine service will be assigned a 24-hour/3rd or 4th day call rotation and will be expected to be in house and available during that entire time. The only exceptions to this rule are illness, outpatient clinic obligations, or other arrangements previously made with the CCM fellow and attending.
- 3) The non-post call residents will be expected to stay until their work is done. It would be unusual that this would occur before 5pm on non-post call days.
- 4) New patients that are seen after hours should be seen promptly by CCM resident who will, after making a quick assessment, call the fellow. For unstable or decompensating patients it is imperative that the resident, fellow and attending be readily available to come to the bedside so that the highest quality of care can be delivered. Fellows covering the weekends will be expected to see all new consults even if initially seen and evaluated by the resident.
- 5) The on-call CCM resident also carries a code pager. The house officer is responsible for attending all adult code blues while carrying the pager. The house officer may not leave the hospital while carrying the code pager.
- 6) The UNMC Chief Resident makes the call schedule for the CCM rotation. Please contact him or her if you have any special requests.
- 7) Vacation: Residents are not allowed to take vacation on the CCM rotation
- 8) Ob/Gyn Call: The ICU resident may participate on a limited basis in the weekend call pool at UNMC.
- 9) Continuity Clinic: The ICU resident's continuity clinic is Friday afternoons.

Educational Activities:

- 1) Textbooks
 - a. A general internal medicine textbook, i.e., Harrison's or Cecil's is a good source for background information, to be used in conjunction with journal articles and Up to Date. Multiple resources are provided in the residents' lounge or via electronic means
- 2) Conferences
 - a. A schedule of the required CCM lectures will be distributed at the beginning of the month.
 - b. Noon Conference Tuesdays and Thursdays at noon.
 - c. Periodic senior seminars held Tuesday evenings at 5:30 pm in the Eppley Science Hall.

Competency Based Educational Goals and Objectives

Patient Care

Goal: Obtain history, physical findings in a critically ill patient efficiently.

Objectives: The residents will:

- 1) Demonstrate physical examination skills appropriate to various critical presentations.
- 2) Identify historical facts suggestive of an immediate threat to survival.
- 3) Demonstrate the ability to obtain a comprehensive and accurate history of present illness in critical illnesses.
- 4) Demonstrate the ability to prioritize patient care needs.

Goal: Develop procedure skills needed in the care of critically ill patients.

Objectives: As the opportunity arises, the resident will demonstrate the ability to:

- 1) Perform thoracentesis, diagnostic and therapeutic.
- 2) Perform paracentesis, diagnostic and therapeutic.
- 3) Perform lumbar puncture.
- 4) Place a central venous line and interpret hemodynamic data from the catheter.
- 5) Place an arterial line.
- 6) Perform arterial puncture to obtain arterial blood gases.
- 7) Perform tuberculin skin testing.
- 8) Perform endotracheal intubation.
- 9) Interpret ventilatory needs and manage mechanical ventilation.

Goal: Appropriately ask for and utilize consulting physicians.

Objective: The resident will evaluate each patient to determine the need for specialized testing and learn the indications for involvement of other specialists in the care of the patient.

Medical Knowledge

Goal: Understand the use of radiographic tests in critically ill patients.

Objectives: The resident will be able to:

- 1) Appropriately choose radiographic studies based on patient presentation.
- 2) Interpret radiographic tests related to pulmonary diseases including chest roentgenograms, computed axial tomography scans, ventilation/perfusion studies and standard or computed axial tomography scans for pulmonary angiography.
- 3) Establish appropriate therapeutic plans for patients based on these studies.

Goal: Interpret electrocardiogram(EKG) studies.

Objectives: The resident will demonstrate the ability to:

- 1) Interpret EKG studies accurately.
- 2) Order laboratory test that are appropriate based on the EKG.

Interpersonal and Communication Skills

Goal: Provide clear, concise and legible notes to assure communication in critically ill patients.

Objectives: The resident will:

- 1) Document initial findings of the history and physical examination and dictate this report.
- 2) Outline an assessment and therapeutic plan on the day of admission.
- 3) Document daily findings and therapeutic plans.
- 4) Document in the EMR and enter consultations into the EMR which directly answer the questions asked by the primary care provider.

Goal: Establish acceptable sources of information in critically ill patients.

Objective: The resident will demonstrate the ability to utilize multiple sources to obtain information in patients who are comatose, including the patient's family, friends and other health care providers.

Professionalism

Goal: Maintain patient confidentiality

Objectives: The resident will demonstrate:

- 1) The ability to protect health-related patient information per HIPPA compliance.
- 2) List and be aware of sites in the intensive care unit where loss of privacy for the patient may occur.
- 3) Knowledge of HIPPA compliance as it pertains to the critically ill patient.

Goal: Maintain appropriate professional relationships.

Objectives: The resident will demonstrate professional interactions with:

- 1) Medical students.
- 2) Nursing and support staff.
- 3) Supervising faculty.
- 4) Consulting residents.
- 5) Physician peers.

Goal: Apply professional behaviors during the ICU rotation.

Objectives: The resident will:

- 1) Remain in or near the intensive Care Unit to help with other ICU responsibilities when on call.
- 2) Attend all lectures.
- 3) Assist in teaching the medical students.

- 4) Comply with duty hours for the rotation.
- 5) Check out patients in detail to both the on-call resident and the CCM fellow prior to leaving the hospital.

Practice-Based Learning and Improvement

Goal: Develop an understanding of critical illness.

Objective: The resident will acquire a general knowledge of the medical literature regarding the current state of the art regarding the diagnosis and therapy of patients with critical illness seen while on the service.

Systems-Based Practice

Goal: Provide appropriate care for the critically ill patient.

Objective: The resident will prepare a diagnostic and management plan on admission as well as assist in planning transfer from the ICU.

Duties and Responsibilities:

1. Specific responsibilities include:
 - a. Examine their patients at least daily
 - b. Review the laboratory, x-ray, and other new studies at least daily.
 - c. Enter an admission note (history and physical) in One Chart at the time of admission. In the case of CCM consultations, a formal consultation note must be entered after the patient has been staffed.
 - d. Write daily progress notes. When a student is helping the resident the student may write the progress note. However, the resident must review and edit this note to make sure it is correct prior to rounds each morning. The note must include the overall assessment and plan for the day.
 - e. Enter all orders for their patients in One Chart. The fellow and staff will also be able to write orders in the absence of the resident. Students may write orders on patients they are following but the orders must be co-signed by the appropriate resident or fellow. Each resident must review their patients' orders daily and sign all verbal orders within 24 hours of placement.
 - f. Enter either discharge summaries or death summaries in One Chart when any patient leaves the Intensive Care Unit. This must be done within 24 hours of discharge or death. In the case of transfers to the floor, a transfer note, appropriate orders, and checkout to the receiving team is sufficient. When a complicated patient has been in the Intensive Care Unit for a long period of time, the resident should enter an interim hospitalization summary at the end of the month so that the next resident who is on this service will have this available and will make the final discharge or death summary much simpler.
 - g. All transfers to the floor must be discussed with the fellow or the attending. Transfer orders must be written and the primary team who will accept the patient notified about the transfer before the patient can leave the ICU. To insure a smooth transition of care to the ward team, transfer orders should include the following "Please page Dr. _____ (the accepting resident) to acknowledge these orders".
 - h. Perform all procedures on their patients (with the exception of bronchoscopy) after they have discussed this with the CCM fellow and/or the attending staff. The resident should not perform any invasive procedures until they have been adequately supervised by the fellow and /or attending physician. It will remain the option of the fellow to do the procedure. However, it is expected that the residents will perform the majority of the invasive procedures at the discretion of the fellow.
 - i. Remain in or near the intensive Care Unit to help with other ICU responsibilities, attend all lectures, and help teach the medical students on days when they are not post-call or on-call. The exception to this is the day after overnight call. Each resident is only allowed to work 24 hours continuously with an additional 6 hours to complete patient care responsibilities and attend required conferences as provided by the ACGME Common Program Requirements. Prior to leaving the hospital, the post-call resident must check out their patients in detail to both the on-call resident and the CCM fellow. If the patient load for a particular resident

becomes unwieldy, patients can be reassigned to another resident on the team at the discretion of the fellow or attending. In this way, the numbers of patients can be distributed in an equitable way.

- j. Carefully check out their patients to the resident on call prior to leaving the hospital on non-call days. The resident taking call is responsible for all the patients on the CCM team after check-out has occurred. This is also true for coverage after checkout on weekends.
 - k. Attend all Critical Care lectures. All efforts must be made to attend these teaching sessions. With the exception of a true medical emergency or a standing outpatient clinic obligation, attendance at these lectures is required.
- 2) Education
- a. Supervision of medical students and other students assigned to the CCM service in a role as instructor and preceptor shall be a responsibility of the house officer. The resident will supervise and teach the students who are assigned to their patients. The resident should assist the students in discussing physical findings, defining problems and differential diagnoses, and developing treatment plans for their shared patients. The resident must also review and cosign all orders and notes written by the students prior to attending rounds each morning.

Evaluation:

- 1) At the conclusion of each resident's service period, a performance evaluation must be prepared by the responsible attending physician. The assessment should be reviewed personally by the internal medicine resident in the presence of the attending physician.
- 2) At the conclusion of the resident's service period, he/she should complete an evaluation form assessing the quality of the rotation; he/she should also address the teaching undertaken by the attending physician.

Instructions: Please review the Rotation Specific Objectives prior to starting the CCM Rotation. Please contact your attending physician for the month if you have any questions regarding the rotation.