

Name of rotation: MICU and Pink Teams **Division:** Pulmonary & Critical Care Med
Course Director: Carl Shanholtz, M.D. (UMMC) **Site(s):** UMMC & VA
Mark Cowan, M.D. (VA)
Duration of rotation: one month only
 2 weeks possible

General description of the rotation including educational purpose, rationale or value:

The MICU receives patients primarily from the medical wards, emergency room and transfers from community hospitals. The main goal of this rotation is to provide a milieu for the team to learn the principles of critical care medicine. The medical team at UMMC consists of two teams, each with a critical care fellow, two upper level residents and 2 R-1's, and a subintern caring half of a 29-bed ICU. The VA team consists of one upper level resident and 2 R-1's plus a subintern who care for 10 critical care patients. Residents care for critically ill patients with a broad variety of medical illnesses under the guidance of a full-time faculty member from the Division of Pulmonary and Critical Care Medicine. Residents learn the basic and advanced clinical skills required for intensive care medicine through daily rounds with the fellow and faculty member. Emphasis is placed on invasive and non-invasive diagnostic/monitoring procedures, physiology, cost containment, and medical ethics. Residents are encouraged to use library resources to obtain current literature on disease processes and management.

Resident responsibilities, including interns and residents:

The resident's clinical and teaching responsibilities are detailed in the Resident Responsibility document. The resident is expected to assist the critical care fellow in supervising the team members, managing the clinical care of the patients, and educating the interns and students. The critical care fellow has primary care responsibility for all patients admitted to the MICU, including complete history and physical examination, daily progress notes, documentation of all procedures and teaching of residents, interns, and students. All residents are expected to attend Morning Report, Grand Rounds, CPC, Ambulatory Care Seminars, and Journal Club, and small group sessions with faculty of the Division of Pulmonary and Critical Care.

Educational Objectives: An expanded version of the competencies is listed under Core Competencies in Internal Medicine. Those listed here are specific to this rotation.

During this rotation, the PGY-1 resident will:

Patient Care

1. Develop increasing independence in patient evaluation and management.
2. Demonstrate ability to care for critically ill patients as well as principles of cost containment, psychosocial issues and medical ethics through a multidisciplinary approach.
3. Admit up to 5 patients in 24 hours (or 8 in 48 hours), detailing comprehensive history, physical examination, evaluation and management plan.
4. Write daily progress notes for all patients assigned to the intern.
5. Develop efficiency in providing cross-coverage to patients cared for by other interns.

Medical Knowledge

1. Expand knowledge base in internal medicine per specialty-specific objectives.
2. Expand their knowledge base in critical care medicine, e.g., sepsis, renal failure, respiratory failure, GI bleeding, stroke, toxic exposures, TTP and other hematologic diseases, among others.
3. Learn basic ventilatory management of the critical care patient.
4. Attain certification in diagnostic and therapeutic procedures, e.g., arterial line, central venous line, endotracheal intubation, thoracentesis, paracentesis, and lumbar puncture.

Practice-Based Learning

1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.

Interpersonal and Communication Skills – See master list for these competencies.

1. Enhance their interpersonal, leadership and teaching skills.

Professionalism – See master list for these competencies.

System-Based Practice

1. Practice cost-effective health care and resource allocation that does not compromise quality of care.
2. Advocate for quality patient care and assist patients in dealing with system complexities.
3. Partner with health care managers and health care providers to assess, coordinate, and improve health care through interdisciplinary rounds.

During this training, the PGY-2 resident will:

Patient Care

1. Expand knowledge base in internal medicine per specialty-specific objectives.
2. Demonstrate ability to care for critically ill patients as well as principles of cost containment, psychosocial issues and medical ethics through a multidisciplinary approach.
3. Develop increasing independence in patient evaluation and management.
4. Supervise interns and students in their daily patient care, overseeing all evaluation and management.

Medical Knowledge

1. Expand knowledge base in internal medicine per specialty-specific objectives.
2. Expand their knowledge base in critical care medicine.
3. Attain certification in diagnostic and therapeutic procedures, e.g., arterial line, central venous line, endotracheal intubation, thoracentesis, paracentesis, and lumbar puncture.

Practice-Based Learning

1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
2. Lead team discussions and review key literature pertinent to cases on the team.

Interpersonal and Communication Skills – See master list for these competencies.

Professionalism – See master list for these competencies.

System-Based Practice

1. Practice cost-effective health care and resource allocation that does not compromise quality of care.
2. Advocate for quality patient care and assist patients in dealing with system complexities.
3. Partner with health care managers and health care providers to assess, coordinate, and improve health care through interdisciplinary rounds.
4. Facilitate the learning of students and other health care professionals.

During this training, the PGY-3 resident will:

Patient Care

1. Demonstrate independence in the ability to care for critically ill patients as well as principles of cost containment, psychosocial issues and medical ethics through a multidisciplinary approach.
2. Evaluate and manage critically independent patients in an independent fashion.
3. Supervise interns and students in their daily patient care, overseeing all evaluation and management.

Medical Knowledge

1. Expand knowledge base in critical care medicine.
2. Attain certification in diagnostic and therapeutic procedures, e.g., arterial line, central venous line, endotracheal intubation, thoracentesis, paracentesis, and lumbar puncture.

Practice-Based Learning

1. Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
2. Lead team discussions and review key literature pertinent to cases on the team.

Interpersonal and Communication Skills – See master list for these competencies.

Professionalism – See master list for these competencies.

System-Based Practice

1. Practice cost-effective health care and resource allocation that does not compromise quality of care.
2. Advocate for quality patient care and assist patients in dealing with system complexities.

3. Partner with health care managers and health care providers to assess, coordinate, and improve health care through interdisciplinary rounds.
4. Facilitate the learning of students and other health care professionals.

Check all principle teaching methods used during this rotation:

- | | | | |
|-------------------------------------|--------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | Attending teaching rounds | <input checked="" type="checkbox"/> | Interdisciplinary rounds |
| <input checked="" type="checkbox"/> | Patient management discussions | <input checked="" type="checkbox"/> | Small group discussions |
| <input checked="" type="checkbox"/> | Conferences specific to rotation | <input checked="" type="checkbox"/> | Bedside clinical rounds |
| <input checked="" type="checkbox"/> | Individual instruction of procedures | <input checked="" type="checkbox"/> | Review of diagnostic studies, including radiology |
| <input type="checkbox"/> | Other: _____ | | |

Describe the most important educational content, including the mix of diseases, patient characteristics, types of clinical encounters, procedures and services:

Residents care for a wide variety of critically ill patients. The MICU attending utilizes each case for teaching and is the physician of record for all patients. Clinical encounters include rounds and direct patient care.

Check the principal ancillary education materials used:

- | | | | |
|-------------------------------------|-----------------------------|-------------------------------------|------------------------------|
| <input checked="" type="checkbox"/> | Reading lists | <input checked="" type="checkbox"/> | Pathologic material |
| <input checked="" type="checkbox"/> | Radiologic studies | <input type="checkbox"/> | Other noninvasive studies |
| <input checked="" type="checkbox"/> | Handouts on relevant topics | <input checked="" type="checkbox"/> | Articles from the literature |
| <input type="checkbox"/> | Other: _____ | <input checked="" type="checkbox"/> | Case studies |

Methods used to evaluate the resident and the rotation:

- Evaluation of residency performance and professionalism
- Evaluation of attending teaching skills and other attributes
- Rotation assessment by resident
- Observation of resident's clinical competency
- Observation of resident's leadership and teaching skills
- Review of the resident's history/physical exam, progress notes and documentation of procedures in the chart
- Resident's attendance of rounds and conferences monitored

Identify strengths and limitations specific to the resources of the sponsoring institution:

This is a tertiary referral center which receives critically ill patients with a wide variety of medical conditions. The MICU critical care team has six physicians who are Board certified in critical care and the institution has excellent diagnostic and therapeutic facilities.

Conferences or Attending/Patient Care Rounds: (Journal club, division rounds, etc.)

<u>Name</u>	<u>Location</u>	<u>Day</u>	<u>Time</u>
Attending Rounds	UMMC or VA	Daily	9:00-12:00 pm

The resident and faculty members of the Postgraduate Education Committee reviewed and edited the content of this curriculum at its meeting on 9/18/07.