

RONALD REAGAN-UCLA MEDICAL INTENSIVE CARE UNIT (MICU) CURRICULUM

Target: PGY 1-3
Updated September 2018

A. EDUCATIONAL OVERVIEW

The Medical Intensive Care Unit (MICU) is a rigorous clinical training experience that extends training in critical care medicine at a quaternary care center.

B. ROTATION DESCRIPTION AND STRUCTURE

The clinical rotation is based at Ronald Reagan-UCLA Medical Center, and trainees rotate for 2-4 weeks at a time as either an intern (PGY 1) or resident (PGY 2/3). Trainees integrate into a team consisting of an attending physician, fellow, resident, and intern to provide direct patient care throughout the patient's hospitalization in the MICU. Trainees will take regular call to admit patients, and duty hours are designed to be compliant with the Residency Review Committee (RRC) requirements. Specific orientation materials will be provided by the sponsoring Internal Medicine program at UCLA.

C. OBJECTIVES

The goals and objectives are assigned according to the level of training. Trainees are expected to demonstrate competency of each of these objective to demonstrate successful completion of this assignment.

1. Objectives for Interns (PGY 1)

At the completion of this rotation, interns will be able to:

- Gather relevant historical information and perform a relevant medical interview and examination of critically ill patients. (PC1)
- Formulate differential diagnoses and outline a plan for evaluating and managing patients admitted to the MICU. (PC1, MK1)
- Demonstrate organizational skills necessary for the care of critically ill patients, including prioritization of patient problems and use of information technology. (PC2, PBLI4, PROF2)
- Efficiently and effectively chart daily progress notes in the medical record. (PROF2, ICS3)
- Effectively cross-cover patients when other team members are not available. (PC3, PROF1/2, ICS2)
- Appropriately seek consultation and diagnostic testing. (PC1/3/5, MK1, SBP1)
- Identify the indications for mechanical ventilation and invasive hemodynamic monitoring, and manage patients on ventilators and with pulmonary artery (PA) catheters. (PC2, MK1)
- Explain the roles and responsibilities of interdisciplinary team members, including nurses, social workers, and case managers, and engage these team members effectively to advance and enhance the care of patients. (ICS2, SBP1)
- Participate in family meetings and discuss withdrawal of care when indicated. (PROF1/3, ICS1, SBP1)

- Explain the discharge/transfer plan, including selection of an appropriate level of care. (PC2, SBP1/4)
- Describe the indications and risks, as well as perform the following procedures: venipuncture, arterial puncture, arterial line placement, lumbar puncture, central venous catheter placement, nasogastric tube insertion. (PC4, MK2)

2. Objectives for Residents (PGY 2/3)

In addition to the competencies expected for interns, the resident should be able to:

- Manage the team effectively to deliver patient care, including demonstrating organization skills, effective communication, and leadership. (PC3, SBP1, ICS2)
- Engage multidisciplinary team members effectively to advance and enhance the care of patients. (PC2/3, ICS2, PROF1, SBP1)
- Direct and engage in family meetings effectively, including eliciting understanding, delivering medical recommendations, and incorporating the values of the patient and/or family into the plan of care. (PROF1/3, ICS1)
- Competently perform the following procedures independently and supervise interns in the performance of these procedures for which the resident is certified: venipuncture, arterial puncture, arterial line placement, lumbar puncture, central venous catheter placement, nasogastric tube insertion. (PC3/4)

D. CORE TOPICS IN CRITICAL CARE

The trainee is expected to explain the differential diagnosis, diagnostic approach, and appropriate treatment plan for the following conditions and diseases:

- Hypoxemic and Hypercapneic Respiratory Failure
- Adult Respiratory Distress Syndrome (ARDS)
- Pulmonary Embolism
- Obstructive Lung Disease
- Massive Hemoptysis
- Shock
- Sepsis
- Pneumonia
- Meningitis
- Nosocomial Infections
- Gastrointestinal Bleeding (upper and lower)
- Acute and Chronic Liver Failure
- Pancreatitis
- Status Epilepticus

- Diabetic Ketoacidosis
- Adrenal Crisis
- Toxic Ingestion and Poisoning
- Acute Renal Failure
- Malnutrition

In addition, trainees are expected to explain (indications, risks, benefits, and complications) and/or implement the following practices into patient care:

- Airway management
- Mechanical ventilation
- Hemodynamic monitoring
- Sedation
- Neuromuscular blockade
- Medical-legal issues
- End-of-life Care

E. TEACHING METHODS

Clinical education is provided through direct patient care and attending rounds with the supervising attending and fellow physicians. Interns and residents are expected to function as the primary provider of care for critically ill patients at this quaternary care center.

Additional education is provided through participation in resident-led journal club (review of original research articles) on weekday mornings. Each resident will be selected to lead at least one session.

The attending or fellow will lead additional didactic lectures relating to critical care medicine at noon.

F. SUPERVISION AND EVALUATION

All housestaff and patient care will be supervised by the attending physician.

Residents will be evaluated by the supervising attending and fellow. Direct verbal feedback may be provided throughout the rotation, and written evaluation will be submitted electronically in MedHub at UCLA at the end of the rotation. These evaluations will be forwarded to the trainee's home institution, and can be reviewed by the resident and program.

G. EDUCATIONAL RESOURCES

Electronic resources are also available through UCLA Health and UCLA.

- UpToDate
- Harrison's Principles of Internal Medicine
- PubMed
- UCLA Library