<u>Family Medicine Residency</u> <u>ICU Rotation</u> Grant K. Studebaker, M.D (updated 6/30/2021)

Rotation Goals

The main goal of the ICU rotation is to provide residents with experience with admission, evaluation, treatment and interaction with subspecialty physicians of adult intensive care patients.

The resident will become familiar with the following goals:

- manage critically ill adult medicine patients during hospital stay
- ventilator management of patients with respiratory failure
- protocols and mechanisms for successfully weaning patients from ventilator
- review the latest research regarding care of critically ill adult medicine patients
- understand and appreciate methods of evaluation and treatment of critically ill patients from the point of view of Board Certified Pulmonary/Critical Care Sub specialist.

Supervision

Direct observation is provided by Intensivist in the ICU

Rotation Objectives

By the end of the ICU rotation, PGY II residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Perform a comprehensive history and physical examination	Conferences/Didactics	Direct Feedback	Daily
	of the adult patient.	Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
	Develop a rational plan of care for patients including	Conferences/Didactics	Direct Feedback	Daily
	diagnostic testing, initiation and alteration of medications,	Daily Rounds	Global Evaluation	Monthly
	and specialty consultation.	Research Discussions		
		Self Directed Learning		
	Develop skills that allow for up to date, compassionate care	Conferences/Didactics	Direct Feedback	Daily
	of the adult patient admitted to the intensive care unit while	Daily Rounds	Global Evaluation	Monthly

	integrating evidence based medicine, local standards of care, nationally defined quality care markers and specialty	Research Discussions Self Directed Learning		
	recommendations upon consultation. Interpret appropriate ethical considerations of the critically ill including discussions of "DNR/DNI" status, initiation and/or withdrawal of artificial nutrition and IV hydration, appropriate surgical intervention for placement of	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	permanent airways for ventilator dependent patients and PEG tube placement. Maintain adequate, compassionate communication between the patient and medical staff.	Conferences/Didactics Daily Rounds	Direct Feedback Global Evaluation	Daily Monthly
		Research Discussions Self Directed Learning		
	Manage and diagnose fluid and electrolyte disorders including hypo/hyperkalemia, hypo/hypernatremia, hypo/hypercalcemia, and acidosis/alkalosis.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	 Under direct supervision perform the following procedures generally performed on ICU patients: Arterial blood gas evaluation (10) Chest x-ray interpretation (10) 	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Medical Knowledge	SPECIALTY SPECIFIC OBJECTIVES	<u>_</u>		
	Develop an understanding of normal anatomy and physiology and apply it to the diagnosis and treatment of ICU patients.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Implement knowledge of current protocols and standards of care for critically ill patients into patient care	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Develop an understanding of ACLS/BLS protocols for unstable patients	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly

Apply guidelines to initiate endotracheal intubation and proper mechanisms/techniques of intubation into patient care.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of cardiovascular conditions including cardiac arrest, myocardial infarction, dysrhythmias, congestive heart failure, hypertension, cardiomyopathies, pericarditis and coronary artery disease.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of gastrointestinal disorders including hepatitis, cirrhosis, pancreatitis, colitis, diverticulitis, cholecystitis, peptic ulcer disease, and bowel obstruction.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of endocrine conditions including diabetes mellitus, thyroid disorders, adrenal diseases, and lipid disorders.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of renal conditions including urinary tract infections, nephrolithiasis, acute and chronic renal failure and obstruction.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of hematologic conditions including anemia, coagulopathies, mononucleosis, polycythemia, and major hemoglobinopathies.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of musculoskeletal conditions including back pain, rheumatoid arthritis, collagen vascular diseases and osteoarthritis	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of infectious diseases (bacterial, viral, and fungal) that are commonly encountered in the adult population.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Develop an understanding of neurological conditions including stroke/TIA's, seizures, meningitis, coma, movement disorders, dementia, delirium, nerve entrapment syndromes and tumors.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly

	Develop an understanding of pulmonary disorders including	Conferences/Didactics	Direct Feedback	Daily
	asthma, COPD, bronchitis, pneumonia, thromboembolism,	Daily Rounds	Global Evaluation	Monthly
	fibrosis, neoplasms, respiratory failure and evaluation of	Research Discussions		
	pulmonary function testing.	Self Directed Learning		
	Develop adequate knowledge of the common disorders of	Conferences/Didactics	Direct Feedback	Daily
	the critically ill adult medical patient as managed by board	Daily Rounds	Global Evaluation	Monthly
	certified sub specialist in Pulmonology/Critical Care.	Research Discussions		
		Self Directed Learning		
	Develop an understanding of central venous access	Conferences/Didactics	Direct Feedback	Daily
	placement and care and apply knowledge to patient care	Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
Practice Based	SPECIALTY SPECIFIC OBJECTIVES			
Learning and	See General Family Medicine Objectives for a			
Improvement	comprehensive list.			
	Develop tools to help meet the needs of patients	Conferences/Didactics	Direct Feedback	Daily
		Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
	Incorporate evidence-based medicine and resources into the	Conferences/Didactics	Direct Feedback	Daily
	care of ENT patients.	Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
	Review current literature relevant to the care of individual	Conferences/Didactics	Direct Feedback	Daily
	patients and the community.	Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
Interpersonal and	SPECIALTY SPECIFIC OBJECTIVES			
Communication	See General Family Medicine Objectives for a			
Skills	comprehensive list.			
	Communicate effectively with patients and their families	Conferences/Didactics	Direct Feedback	Daily
	while in the presence of their daily preceptor.	Daily Rounds	Global Evaluation	Monthly
		Research Discussions		
		Self Directed Learning		
	Convey information in a clear and concise manner to	Conferences/Didactics	Direct Feedback	Daily
	patients, families, and other health professionals (i.e., use	Daily Rounds	Global Evaluation	Monthly
	appropriate vocabulary choice, realistic outcomes, and	Research Discussions		

	working with difficult patients and family)	Self Directed Learning		
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Family Medicine Objectives for a comprehensive list.			
	Provide compassionate and high-quality care to all patients regardless of gender, age, culture, race, religion, disabilities, sexual orientation or socioeconomic class	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Determine best methods for consultation of subspeciality physicians while caring for the critically ill adult medicine patient	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Behave in a professional manner when interacting with patients or other health care providers.	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
Systems-Based	SPECIALTY SPECIFIC OBJECTIVES			
Practice	See General Family Medicine Objectives for a comprehensive list.			
	Develop a better understanding of the role of subspecialty medicine in appropriate consultation of other specialty providers for the critically ill patient so as to minimize morbidity and mortality while also minimizing time spent in the critical care department	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Understand the interactivity between subspecialty providers to maximize survival and stabilization	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Incorporate considerations of cost awareness and risk- benefit analysis in patient care	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly
	Advocate for quality patient care and optimal patient care systems	Conferences/Didactics Daily Rounds Research Discussions Self Directed Learning	Direct Feedback Global Evaluation	Daily Monthly

Determine appropriate timing for transfer of patients into or	Conferences/Didactics	Direct Feedback	Daily
out of the critical care setting/ICU	Daily Rounds	Global Evaluation	Monthly
	Research Discussions		
	Self Directed Learning		

Educational Resources

www.uptodate.com (available free through www.utdol.com in Jackson General Hospital based computers) The Washington Manual of Medical Therapeutics, 2nd edition Practical Guide to The Care of the Medical Patient, Fred Ferri 6th edition www.epocrates.com www.emedicine.com ACLS Handbook Tarascon Internal Medicine Current Clinical Strategies in Family Medicine 2006 edition Additional information provided specifically by preceptor prior to beginning rotation.