

Keck Medical Center Medical ICU Orientation 2020 - 2021

Faculty in Charge of Rotation:

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First Day of Rotation:

Report to Keck Cafeteria for sign-out at 7:00 AM for those starting on Medicine ICU days.

Report to Keck Cafeteria for sign-out at 6:00 PM for those starting on Medicine ICU nights.

Please make sure to watch the Orientation Video prior to starting this rotation. Videos can be accessed through MyEvaluations or on the Chiefs' website (uscmedicine.blog / Resources / Rotation Orientation & Objectives / Medical ICU).

GOALS

The Medicine ICU rotation is the core intensive care unit experience. The overarching goal of the Keck MICU service is to create a supportive, well supervised and dynamic environment where interns and residents of varying training and skill levels rotating with the Division of Pulmonary Critical Care Sleep Medicine (PCCSM), can acquire knowledge, skills and expertise in the management of critically ill medical and surgical patients. The critical care environment challenges trainees to develop skills for recognizing the acuity of life threatening illness in a predominately urban, medically underserved cohort of socioeconomically, culturally and ethnically diverse patients. Interns and residents work with PCCSM fellows in a collaborative, multidisciplinary critical care team to provide timely, appropriate interventions and participate in a culture of continuous quality improvement and safety based on sound evidence-based practices, broadly accepted quality care measures and institutional initiatives.

In addition to fostering competence in the areas of patient care and medical knowledge, the service provides critical experience in collaborating with other members of the healthcare team, including care coordinators, social workers, and pharmacists, as well as students and fellow residents, which builds skill in interpersonal communication and professionalism. Exposure to the intricacies of daily hospital care, including discharge planning and triage to higher or lower levels of care, builds competency in systems-based practice, provides opportunities to learn from mistakes, and builds patterns of practice-based learning.

MILESTONES

USC/LAC+USC Internal Medicine Residency Medical ICU Rotation

OVERALL COMPETENCY PROGRESSION BY CORE COMPETENCY AND PGY LEVEL

(Adapted from ABIM Developmental Milestones)

CORE COMPETENCY: PATIENT CARE

PGY LEVEL			GOAL – Gathers and synthesizes essential and accurate information to define each patient’s clinical problem OBJECTIVES
1			<ul style="list-style-type: none"> a. Acquires accurate histories from patient in an efficient prioritized, and hypothesis driven fashion b. Seeks and obtains data from secondary sources when needed
	2		<ul style="list-style-type: none"> a. Obtain relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated, and detailed information that may not often be volunteered by the patient
		3	<ul style="list-style-type: none"> a. Role model gathering subtle and reliable information from the patient for junior members of the healthcare team when applicable.
PGY LEVEL			GOAL – Develops and achieves comprehensive management plan for each patient OBJECTIVES
1			<ul style="list-style-type: none"> a. Consistently develops appropriate care plan b. Recognizes situations requiring urgent or emergent care c. Seeks additional guidance and/or consultation as appropriate
	2		<ul style="list-style-type: none"> a. Appropriately modifies care plans based on patient’s clinical course, additional data and patient preferences b. Recognizes disease presentations that deviate from common patterns and require complex decision making c. Manages complex acute and chronic diseases
		3	<ul style="list-style-type: none"> a. Role models and teaches complex and patient centered care b. Develops customized prioritized care plans for the most complex patients, incorporating diagnostic uncertainty and cost effectiveness principles.
PGY LEVEL			GOAL – Manages patients with progressive responsibility and independence OBJECTIVES
1			<ul style="list-style-type: none"> a. Requires direct supervision to ensure patient safety and quality care b. Seeks additional guidance and/or consultation as appropriate
	2		<ul style="list-style-type: none"> a. Requires indirect supervision to ensure patient safety and quality care
		3	<ul style="list-style-type: none"> a. Independently manages patients across clinical settings who have a broad spectrum of clinical disorders including undifferentiated syndrome
PGY LEVEL			GOAL – Skill in performing procedures OBJECTIVES
1			<ul style="list-style-type: none"> a. Awareness of indications, contraindications, risks and benefits of common invasive procedures
	2	3	<ul style="list-style-type: none"> b. Appropriately perform invasive procedures and provide post-procedure management for common procedures when applicable.
PGY LEVEL			GOAL – Requests and provides consultative care OBJECTIVES
1			<ul style="list-style-type: none"> a. Provides consultative services for patients with clinical problems requiring basic risk assessment b. Asks meaningful clinical questions that guide the input of consultants
	2	3	<ul style="list-style-type: none"> a. Provides consultative services for patients with basic and complex clinical problems requiring detailed risk assessment b. Appropriately weighs recommendations from consultants in order to effectively manage patient care
Evaluation Methods			

Faculty evaluation, Direct observation			
CORE COMPETENCY: MEDICAL KNOWLEDGE			
PGY LEVEL		GOAL – Clinical Knowledge	
		OBJECTIVES	
1			a. Possesses the scientific, socioeconomic and behavioral knowledge required to provide care for common medical conditions and basic preventive care
	2	3	a. Possesses the scientific, socioeconomic and behavioral knowledge required to provide care for complex medical conditions and comprehensive preventive care
PGY LEVEL		GOAL – Knowledge of diagnostic testing and procedures.	
		OBJECTIVES	
1			a. Consistently interprets basic diagnostic tests accurately b. Needs assistance to understand the concepts of pre-test probability and test performance characteristics
	2		a. Interprets complex diagnostic tests accurately b. Understands the concepts of pre-test and test performance characteristics
		3	b. Interprets complex diagnostic tests accurately c. Understands the concepts of pre-test and test performance characteristics d. Teaches the rationale and risks associated with common procedures and anticipates potential complications when performing procedures
Evaluation Methods			
Faculty evaluation, Direct observation, Conference Attendance			
CORE COMPETENCY: SYSTEMS BASED PRACTICE			
PGY LEVEL		GOAL – Works effectively within an interprofessional team	
		OBJECTIVES	
1			a. Identifies roles of other team members but does not recognize how/when to utilize them as resources b. Frequently requires reminders from team to complete physician responsibilities.
	2		a. Understands the roles and responsibilities of all team members but uses them ineffectively b. Participates in team discussions when required but does not actively seek input from other team members
		3	a. Understands the roles and responsibilities of and effectively partners with, all members of the team. b. Actively engages in team meetings and collaborative decision making
PGY LEVEL		GOAL – Recognizes system error and advocates for system improvement	
		OBJECTIVES	
1			a. Does not recognize the potential for system error
	2		a. Recognizes the potential for error within the system b. Identifies obvious or critical causes of error and notifies supervisor accordingly c. Recognizes the potential risk for error in the immediate system and takes necessary steps to mitigate that risk d. Willing to receive feedback about decisions that may lead to error or otherwise cause harm
		3	a. Identifies systemic causes of medical error and navigates them to provide safe patient care b. Advocates for safe patient care and optimal patient care systems c. Activates formal system resources to investigate and mitigate real or potential medical error d. Reflects upon and learns from own critical incidents that may lead to medical error
PGY LEVEL		GOAL – Identifies forces that impact that cost of health care, and advocates for, and practices cost-effective care	
		OBJECTIVES	
1			a. Does not consider limited health care resources when ordering diagnostic or therapeutic interventions

	2		<ul style="list-style-type: none"> a. Recognizes that external factors influence a patient’s utilization of health care and may act as barriers to cost effective care b. Minimizes unnecessary diagnostic and therapeutic tests c. Possesses an incomplete understanding of cost awareness principles for a population of patients
		3	<ul style="list-style-type: none"> a. Consistently works to address patient specific barriers to cost effective care b. Advocates for cost conscious utilization of resources c. Incorporates cost awareness principles into standard clinical judgments and decision making including screening tests
PGY LEVEL		GOAL – Transitions patients effectively within and across health delivery systems	
		OBJECTIVES	
1			a. Written and verbal care plans during times of transition are incomplete or absent
	2		<ul style="list-style-type: none"> b. Communication with future caregivers is present but with lapses in pertinent or timely information c. Recognizes the importance of communication during times of transition
		3	<ul style="list-style-type: none"> a. Appropriately utilizes available resources to coordinate care and ensures safe and effective patient care within and across delivery systems b. Proactively communicates with past and future care givers to ensure continuity of care.
Evaluation Methods			
Faculty Evaluation			
CORE COMPETENCY: PRACTICE BASED LEARNING AND IMPROVEMENT			
PGY LEVEL		GOAL – Monitors practice with a goal for improvement	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Unable to self-reflect upon one’s practice or performance b. Misses opportunities for learning and self-improvement
	2		<ul style="list-style-type: none"> a. Inconsistently acts upon opportunities for learning and self-improvement b. Inconsistently self reflects upon one’s practice or performance and inconsistently acts upon those reflections
		3	<ul style="list-style-type: none"> a. Regularly self reflects upon one’s practice or performance and consistently acts upon those reflections to improve practice b. Recognizes sub-optimal practices or performance as an opportunity for learning and self-improvement
PGY LEVEL		GOAL – Learns and improves via feedback	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Rarely seeks feedback b. Responds to unsolicited feedback in a defensive fashion c. Temporarily or superficially adjusts performance based on feedback
	2		<ul style="list-style-type: none"> a. Solicits feedback only from supervisors b. Is open to unsolicited feedback c. Inconsistently incorporates feedback
		3	<ul style="list-style-type: none"> a. Solicits feedback from all members of team and patients b. Consistently incorporates feedback c. Welcomes unsolicited feedback
PGY LEVEL		GOAL – Learns and improves at the point of care	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Has limited awareness of or ability to use information technology b. Rarely “slows down” to reconsider an approach to a problem, ask for help, or seek new information c. Can translate medical information needs into well-formed clinical questions with assistance
	2		<ul style="list-style-type: none"> a. Inconsistently “slows down” to reconsider an approach to a problem, ask for help, or seek new information b. Can translate medical information needs into well-formed clinical questions independently

		3	<ul style="list-style-type: none"> a. Routinely “slows down” to reconsider an approach to a problem, ask for help, or seek new information b. Routinely translates new medical information needs into well-formed clinical questions.
Evaluation Methods			
Faculty Evaluation, Direct Observation			
CORE COMPETENCY: PROFESSIONALISM			
PGY LEVEL		GOAL – Has professional and respectful interactions with patients, caregivers, and members of the interprofessional team	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Inconsistently demonstrates empathy, compassion and respect for patients and caregivers b. Inconsistently considers patient privacy and autonomy c. Inconsistently demonstrates responsiveness to patients’ and caregivers’ needs in an appropriate fashion
	2		<ul style="list-style-type: none"> a. Consistently respectful in interactions with patients, caregivers and members of the interprofessional team, even in challenging situations b. Emphasizes patient privacy and autonomy in all interactions c. Is available and responsive to needs and concerns of patients, caregivers and members of the interprofessional team to ensure safe and effective care
		3	<ul style="list-style-type: none"> a. Demonstrates empathy, compassion and respect to patients and caregivers in all situations b. Demonstrates a responsiveness to patient that supersedes self-interest c. Anticipates, advocates for, and proactively works to meet the needs of patients and caregivers d. Positively acknowledges input of members of the interprofessional team and incorporates that input into plan of care as appropriate.
PGY LEVEL		GOAL – Accepts responsibility and follows through on tasks	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Completes most assigned tasks in a timely manner but may need multiple reminders or other support b. Accepts professional responsibility only when assigned or mandatory
	2		<ul style="list-style-type: none"> a. Completes patient care tasks in a timely manner in accordance with local practice and/or policy b. Completes assigned professional responsibilities without questioning or the need for reminders
		3	<ul style="list-style-type: none"> a. Prioritizes multiple competing demands in order to complete tasks and responsibilities in a timely and effective manner b. Willingness to assume professional responsibility regardless of the situation
PGY LEVEL		GOAL – Responds to each patient’s unique characteristics and needs	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Sensitive to and has basic awareness of differences related to culture, ethnicity, gender, race, age and religion in the patient/caregiver encounter b. Requires assistance to modify care plan to account for a patient’s unique characteristics and needs
	2		<ul style="list-style-type: none"> a. Seeks to fully understand each patient’s unique characteristics and needs based upon culture, ethnicity, gender, religion, and personal preference. b. Modifies care plan to account for a patient’s unique characteristics and needs with partial success
		3	<ul style="list-style-type: none"> a. Recognizes and accounts for the unique characteristics and needs of the patient/caregiver b. Appropriately modifies care plan to account for a patient’s unique characteristics and needs
PGY LEVEL		GOAL – Exhibits integrity and ethical behavior in professional conduct	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Honest in clinical interactions and documentation. Requires oversight for professional actions b. Has a basic understanding of ethical principles, formal policies and procedures and does not intentionally disregard them
	2		<ul style="list-style-type: none"> a. Honest and forthright in clinical interactions and documentation b. Demonstrates accountability for the care of patients

		3	<ul style="list-style-type: none"> a. Demonstrates integrity, honesty and accountability to patients b. Actively manages challenging ethical dilemmas and conflicts of interest c. Identifies and responds appropriately to lapses of professional conduct among peer groups
Evaluation Methods			
Faculty Evaluation, Peer Evaluation, Direct Observation			
CORE COMPETENCY: INTERPERSONAL AND COMMUNICATION SKILLS			
PGY LEVEL		GOAL – Communicates effectively with patients and caregivers	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Engages patients in discussion of care plans and respects patient preferences when offered by the patient, but does not actively solicit preferences b. Defers difficult or ambiguous conversations to others c. Attempts to develop therapeutic relationships with patients and caregivers but is often unsuccessful
	2		<ul style="list-style-type: none"> a. Engages patients in shared decision making in uncomplicated conversations b. Requires assistance facilitating discussions in difficult or ambiguous conversations c. Requires guidance or assistance to engage in communication with persons of different socioeconomic and cultural backgrounds
		3	<ul style="list-style-type: none"> a. Incorporates patient specific preferences into plan of care b. Identifies and incorporates patient preference in shared decision making across a wide variety of patient care conversations c. Quickly establishes a therapeutic relationship with patients and caregivers, including persons of different socioeconomic and cultural backgrounds
PGY LEVEL		GOAL – Communicates effectively in interprofessional teams	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Uses unidirectional communication that fails to utilize the wisdom of the team b. Resists offers of collaborative input
	2		<ul style="list-style-type: none"> a. Inconsistently engages in collaborative communication with appropriate members of the team b. Inconsistently employs verbal, non-verbal and written communication strategies that facilitate collaborative care
		3	<ul style="list-style-type: none"> a. Consistently and actively engages in collaborative communication with all members of the team b. Verbal, non-verbal and written communication consistently acts to facilitate collaboration with the team to enhance patient care.
PGY LEVEL		GOAL – Appropriate utilization and completion of health records	
		OBJECTIVES	
1			<ul style="list-style-type: none"> a. Health records are disorganized and inaccurate
	2		<ul style="list-style-type: none"> a. Health records are organized and accurate but are superficial and miss key data or fail to communicate clinical reasoning
		3	<ul style="list-style-type: none"> a. Health records are organized, accurate, comprehensive, and effectively communicate clinical reasoning b. Health records are succinct, relevant and patient specific
Evaluation Methods			
Faculty Evaluation			

ROTATION STRUCTURE

STARTING THE ROTATION

Before the first day on service, sign-out should occur from the outgoing member to the appropriate oncoming team member (resident to resident, intern to intern). Please make sure to watch the Orientation Video prior to starting this rotation. Videos can be accessed through MyEvaluations or on the Chief's website (uscmmedicine.blog / Resources / Rotation Orientation & Objectives / Medical ICU).

DAILY SCHEDULE

7:00 AM – 7:30 AM	Sign-out
7:30 AM – 9:30 AM	Work Rounds/Fellow Rounds
9:30 AM – 12:00 PM	Attending Bedside Rounds
12:00 PM – 1:00 PM	Lunch/Conference (Grand Rounds, M&M, CPC)
1:00 PM – 6:00 PM	Patient Care and Management
6:00 PM – 6:30 PM	Sign-out to Night Float resident

Fellow Rounds

Fellow Rounds on all of the team's established patients must be conducted with all the team members present every morning. All team members, therefore, will become familiar with all of the patients on the team. These rounds are led by the fellow without the attending. The goal is to ensure that a management plan for the day as well as the overarching plan for each patient is established daily. The team should strive to see all patients during this hour, but should prioritize sick/unstable patients, patients pending discharge, and new patients.

Attending Bedside Rounds

Attending Bedside Rounds are performed from 9:30 AM – 12:00 PM every Monday through Friday. The attending should review and discuss all of the team's new admissions from the previous twenty-four hours. Any new patient must be seen by and discussed with the attending with the team at the bedside. Faculty are expected to perform bedside teaching, discussion of pathophysiology, and should use current available studies to aid in diagnostic and therapeutic decisions. Faculty must perform discharge planning and management rounds daily. Faculty must evaluate all of their team's patients each day and must co-sign all necessary notes. All documentation, including the initial history and physical must be signed within 24 hours. Each faculty attending is available for their team at all times when they are on service.

TEAM STRUCTURE

There are two teams that make up the MICU service. Each team is comprised of one faculty attending, one fellow, 2-3 senior residents, and 2 interns.

An attending will be available to the house officers at all times of the day. Each attending will perform teaching rounds five days per week with their individual teams and will cover the weekends within each firm. The housestaff are expected to use this attending as the primary resource for issues regarding patient care.

One PCCSM fellow is assigned to cover the MICU and emergency pulmonary consults in house overnight as a night-float.

ADMISSION SCHEDULE

The MICU accepts new admissions daily by the MICU attending and are distributed between the two MICU teams by patient location (8th floor, 7th floor). The fellow and resident must see and evaluate all admissions assigned to the intern who they supervise. The team's attending is always responsible for all activities no matter the time of day.

SIGN-OUT

Each MICU night float resident and intern team are responsible for cross-covering and admitting for one MICU team overnight. The MICU team signing out to the night float should provide a written handoff ("Physician Handoff") in addition to preparing for a verbal sign-out. Sign-out should take place in a protected, quiet space, and follow the I-PASS format. It is the responsibility of the team member signing out patients to update the Physician Handoff. The MICU team should arrive promptly to receive sign-out on their patients at 7:00 AM and the night float should arrive promptly to receive sign-out at 6:00 PM.

CALL

Residents

There is no overnight call for residents. The residents on service will alternate service coverage for each of the weekends during the rotation. Overnight coverage of the MICU is managed by a MICU Night Float resident for one week at a time.

DAYS OFF

All house officers on MICU will get an average of one day off per week across the duration of the rotation. Days off will be designated by the Chief Residents and is available on AMION. Predetermining everyone's days off will ensure that days off are distributed fairly and that the appropriate complement of residents and interns are in the hospital at all times.

CURRICULUM

EDUCATIONAL PLAN

The purpose of this rotation is to train residents to competently care for patients with a broad range of medical problems who require hospital admission to the intensive care unit. The rotation is designed to increase diagnostic skills, reasoning ability, therapeutic acumen, objective knowledge, overall patient care skills and team management skills.

LEARNING OBJECTIVES

	PGY 1	PGY 2	PGY 3
Patient Care	<ul style="list-style-type: none"> • Resident will obtain a detailed history of the illness, emphasizing chronology of the events with good review of systems. • Resident's presentation will include pertinent positive and negatives findings • Resident will use nonpatient sources of data if cannot give a history for example calling the nursing home, the EMT, or the family. • Resident will be able to tailor the physical examination to patient's complaints. • Resident will be able to accurately identify and characterize the signs and stages of SHOCK (septic, cardiovascular, and hypovolemic). • Resident will be able to identify and characterize cardiac murmurs and sounds • Resident will be able to identify and characterized pulmonary auscultatory findings. • Residents should be proficient identifying and interpreting the 	<ul style="list-style-type: none"> • Obtain a detailed HPI emphasizing chronology of presentation and containing good descriptions of systems • Resident's presentation will include appropriate pertinent positive and negatives • Resident will use appropriate nonpatient sources of data cannot give a history • Resident will tailor the physical examination to patient's complaints • Resident will be able to accurately identify and characterize the signs and stages of septic, cardiovascular, and hypovolemic shock. 	<ul style="list-style-type: none"> • Resident will obtain a detailed HPI emphasizing chronology of presentation and containing good descriptions of systems. • Resident's presentation will include appropriate pertinent positive and negatives. • Resident will use appropriate nonpatient sources of data cannot give a history. • Resident will tailor the physical examination to patient's complaints. • Resident will be able to accurately identify and characterize the signs and stages of septic, cardiovascular, and hypovolemic shock. • Resident will be able to identify and characterize cardiac murmurs and sounds. • Resident will be able to identify and characterized pulmonary auscultatory findings.

	<p>following elements of the physical examination: blood pressure – orthostatics, pulsus paradoxus; cardiopulmonary – pulse examination – venous pulsations – JVD, hepatjugular reflux, v waves and arterial – carotid, femoral, and pulse character; palpation and auscultation – LV impulse (location and characterize) thrill, RV heave, regurgitant murmurs (AL, MR, TR), Stenotic murmurs (AS, MS), Pericardial Rub, S3 and S4, abnormal pulmonary findings – crackles, wheezing, egophony, bronchophony, dullness to percussion, abdominal findings – bowel sounds, fluid wave, shifting illness, neurologic – cold - carlorics, asymmetric reflexes, strength and sensory</p>		
<p>Medical Knowledge</p>	<ul style="list-style-type: none"> • Able to apply pathophysiology and perform focused, cost - effective evaluations of the following complaints/ disorders: • Approach to respiratory failure, acute and progressive dyspnea, pulmonary embolism, COPD, asthma, acute respiratory distress syndrome, Basic ventilator management. • Approach to patient with shock (septic, cardiogenic, hypovlemic), chest pain, cardiopulmonary arrest, hypertensive 	<ul style="list-style-type: none"> • Be proficient in the diagnosis and therapeutic management including monitoring for the adverse effects of specific therapuic management, including monitoring for the adverse effects of specific therapeutic interventions, for the following medical conditions/compla ints: Cardiology - Shock (septic, cardiogenic, hypovolemic) shest pain, cardiopulmonary arrest, hypertensive emergency, artic dissection; Pulmonary - Respiratory failure, Acute and progressive dyspnea, pulmonary embolism, 	<ul style="list-style-type: none"> • Resident understands the epidemiology, pathophysiology, and pharmacology of common critical illness including ARDS, multiple organ system failure, pulmonary embolus, shock, vegetative state and brain death, ketoacidosis and hyperosmolar coma, asthma and COPD, and psychosis/delirium in the ICU setting. • Resident will develop experience in the use of vasoactive drug. • Resident will Resident will achieve or demonstrate competency in all ABIM required procedures as patient case mix allows.

	<p>emergency, aortic dissection</p> <ul style="list-style-type: none"> • Approach to GI bleed, acute liver failure, complications of liver failure • Altered mental status, seizures, stroke, intracranial hemorrhage. • Bleeding diathesis, DI, anticoagulation, VET treatment, HIT diagnosis and treatment, DVT prophylaxis in the ICU setting • Diabetic ketoacidosis, hyper/hypo -kalemia, hyper/hypo -natremia, hypo/hyper -calcemia, renal insufficiency • Nutrition fundamentals • Fever in ICU setting, line infections, meningitis, complications from HIV, community and health care associated pneumonia, fungal diseases, severe sepsis. • Drug overdose and poisoning • Begin to develop interpretative skills of: Oximetry and blood gases, Serum electrolytes, Chest X - rays, Results from thoracentesis, paracentesis, spinal fluid, Pulmonary artery pressure reading, EKG's (see cardiology ward objectives) • Know the indications, limitations, and complications associated with the following test/procedures: Mechanical Ventilation, Lung VQ scan, High - 	<p>COPD, asthma, acute respiratory distress syndrome - Basic ventilator management; GI/hepatology - GI bleed, acute liver failure, complications of liver failure; Neurology - Altered mental status, seizures, stroke, intercranial hemorrhage; Hematology - Bleeding diathesis, DI, anticoagulation, VET treatment, HIT diagnosis and treatment, DVT prophylaxis in the ICU setting; Metabolic & Electrolyte disorders</p> <ul style="list-style-type: none"> • Diabetic ketoacidosis, hyper/hypo - kalemia, hyper/hypo - natremia, hypo/hyper - calcemia, renal insufficiency • Develop proficiency in the interpretation of: Oximetry and blood gases, Serum electrolytes, Chest X-rays, Results from thoracentesis, paracentesis, spinal fluid, Pulmonary artery pressure readings • EKG's (see cardiology ward objectives) • Appropriately order and understand the indications and contraindications as well as complications associated with the following tests/procedures: Mechanical Ventilation, Gastrointestinal endoscopy, CT and MRI imaging of the head, chest, and abdomen, Bronchoscopy and bronchoalveolar lavage, Lung VQ scan, High - resolution CT, lower extremity Doppler 	<ul style="list-style-type: none"> • Resident will demonstrate developing competency in the use ventilatory support.
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	<p>resolution CT, lower extremity Doppler, CT and MRI imaging of the head, C/A/P, Bronchoscopy and bronchoalveolar lavage, Endoscopy, Stress test - chemical or exercise stress testing, stress echo, stress thallium (also addressed in Cardiology ward), Transthoracic echocardiogram, transesophageal echocardiogram</p>		
Practice Based Learning and Improvement	<ul style="list-style-type: none"> • Attend all ICU conferences • Resident will present a minimum of one evidence based medicine review of a topic. • Patient will develop clinical judgment in the strategies used to match treatment protocols with critical illness. • Attend all autopsies preformed on patients expiring in the ICU. 	<ul style="list-style-type: none"> • Resident prioritizes diagnosis and treatment decisions based on patient's severity of illness • Develop clinical judgment in the strategies used to match treatment protocols with critical illness • Present a minimum of one EBM review at topic review and presentation conference. • Attend all ICU conferences • Attend all autopsies preformed on patients expiring in the ICU 	<ul style="list-style-type: none"> • Resident prioritizes diagnosis and treatment decisions based on patient's severity of illness. • Resident will develop clinical judgment in the strategies used to match treatment protocols with critical illness. • Resident will present a minimum of one EBM review at topic review and presentation conference.
Interpersonal and Communication Skills	<ul style="list-style-type: none"> • Resident communicates regularly with patients and his/her family. • Resident is respectful to patient. • Resident is concerned about the patient's comfort. • Resident communicates effectively with other members of the health care team. 	<ul style="list-style-type: none"> • Resident communicates regularly with patients and his/her family. • Resident is respectful to patient. • Resident is concerned about the patient's comfort. • Resident addresses patient care issues such as end of life decisions with moderate faculty input. • Resident provides feedback to junior team members. • Resident functions as an effective team leader. • Resident communicates effectively with other 	<ul style="list-style-type: none"> • Resident communicates regularly with patients and his/her family. • Resident is respectful to patient. • Resident is concerned about the patient's comfort. • Effectively coordinates team to optimize patient care. • Able to deal with challenging patients and families. • Functions as an effective team leader.

		members of the health care team.	
Professionalism	<ul style="list-style-type: none"> • Resident completes the H&P/consultation within 24 hours of contact, and writes a daily progress note. • Resident will follow through with scholarly assignments promptly. • Resident completes medical records on time. • Resident recognized and takes steps to correct his/her deficiencies. • Resident treats team members with respect, including nurses and other health care providers. • Resident acknowledges personal reaction to morbidity and mortality associated with infectious disease • Adheres to all ACGME mandated duty hour restrictions. 	<ul style="list-style-type: none"> • Resident completes the H&P/consultation within 24 hours of contact, and writes a daily progress note. • Resident will follow through with scholarly assignments promptly. • Resident completes medical records on time. • Resident recognized and takes steps to correct his/her deficiencies. • Resident treats team members with respect, including nurses and other health care providers. • Counsel's junior team members on issues of professionalism including personal reactions to the morbidity and mortality associated with the care of patients requiring intensive medical management. • Resident adheres to all ACGME mandated duty hour restrictions. • Resident adheres to all ACGME mandated duty hour restrictions. 	<ul style="list-style-type: none"> • Resident completes the H&P/consultation within 24 hours of contact, and writes a daily progress note. • Resident will follow through with scholarly assignments promptly. • Resident completes medical records on time. • Resident recognized and takes steps to correct his/her deficiencies. • Resident treats team members with respect, including nurses and other health care providers. • Resident adheres to all ACGME mandated duty hour restrictions • Counsel's junior team members on issues of professionalism including personal reactions to the morbidity and mortality associated with the care of patients requiring intensive medical management • Sets a tone of respect and collegiality for the team • Resident adheres to all ACGME mandated duty hour restrictions
Systems Based Practice	<ul style="list-style-type: none"> • Resident can effectively initiate the appropriate clinical pathways. • Resident can effectively initiate the appropriate consultative services • Resident develops a multidisciplinary approach to medical intensive care 	<ul style="list-style-type: none"> • Resident can effectively initiate the appropriate clinical pathways. • Resident can effectively initiate the appropriate consultative services • Resident develops a multidisciplinary approach to medical intensive care • Resident serves as a consultant to other services with moderate faculty input. 	<ul style="list-style-type: none"> • Resident can effectively initiate the appropriate clinical pathways. • Resident can effectively initiate the appropriate consultative services • Resident develops a multidisciplinary approach to medical intensive care • Resident serves as a consultant to other services with moderate faculty input. • Resident critically evaluates all consultant evaluations including conflicting recommendation to develop an effective patient care plan.

EDUCATIONAL METHODS

Direct observation of patient care and bedside teaching occur in the setting of daily inpatient rounds with the attending. Residents evaluate and treat patients both in the capacity of follow-up as well as initial evaluation. The supervising attending reviews and critiques the resident's interpretation of diagnostic studies and formulation of assessments and plans. Residents additionally attend didactic conferences as indicated above.

EDUCATIONAL RESOURCES

- <http://www.thoracic.org/>
- <http://www.chestnet.org>
- <http://www.sccm.org>
- http://www.ardsnet.org/files/ventilator_protocol_2008-07.pdf
- http://www.ardsnet.org/files/pbwtables_2005-02-02.pdf
- <http://www.survivingsepsis.org/Guidelines/Pages/default.aspx>
- <https://www.thoracic.org/statements/cc.php>

EVALUATION TOOLS

The attending physician is responsible for providing verbal feedback and must submit evaluations of the resident physicians in MyEvaluations. The attending must meet face-to-face to provide mid-point and end-of-rotation feedback with all of the house officers they evaluate and indicate that discussion on the evaluation form. Evaluations must be completed within one week of completing a rotation. Peer evaluations for other trainees on the team should be completed in a timely manner.

PATIENT CARE

LOCATION & PATIENT CHARACTERISTICS

- 8 West/8 East
- 7 West/7 East

Both areas are COVID-dedicated Medicine ICU units. 8W/8E area is ran by a PCCSM Attending and PCCSM Fellow. 7W/7E area is ran by Surgery/Neurocritical Care Attending and PCCSM Fellow.

ADMISSIONS

Day Team Admissions: 6:00 AM – 5:00 PM

Night Team Admissions: 5:00 PM – 6:00 AM

Admissions need to be approved by the ICU attending and then assigned to a specific floor. They will include either transfers from Verdugo Hills Hospital or upgrades from the floor.

TRANSFERS

If a patient is stabilized and no longer needs to be in the ICU, the patient can be moved from the ICU to the Telemetry Unit/PCU (2E/2W and 9E/9W are COVID-dedicated Telemetry/PCU beds), or to the med/surg floors.

Transfers from the ICU

When the ICU team deems a patient stable for transfer to a lower level of care, the medicine team will be notified that a patient has been assigned to the medicine team. The medicine team should call the ICU team to receive sign-out. A Transfer Summary will accompany all patients being transferred out of the ICU. The medicine team should addend the Transfer Summary upon transfer of care.

Transfers to the ICU

Patients that a medicine team deems to require a transfer to a higher level of care will have the care of the patient assumed by the ICU team. To initiate an ICU transfer, the PCCSM fellow will need to be notified that there is a patient who necessitates transfer. PCCSM fellow will then evaluate the patient and discuss with the ICU attending. If determined to be an appropriate ICU transfer, Med Consult will notify the team to place orders and to give sign-out to the ICU team. All transfers to the ICU must be accompanied by a Transfer Summary from the ward team. The ICU team is expected to write transfer orders and reconcile all prior active orders.

DISCHARGES

The decision to discharge a patient and the discharge plan must be discussed with the attending each day. This discharge plan should also be discussed with the patients. All hospital discharges require Discharge Instructions and educational material for the patient, appropriate medication reconciliation and prescriptions, appropriate follow-up referrals or appointments, an electronic discharge order, and a Discharge Summary (please see below).

Transfers to other healthcare facilities (another hospital, long-term acute care (LTAC), skilled nursing facility (SNF), rehab, etc.) require a Discharge Summary (please see below).

MAT CODE & CODE BLUES

If a patient appears acutely unstable, do not hesitate to call the fellow on your team. Always document goals of care discussions, even if the decision is to remain full code. Keep in mind that the code status obtained during the hospitalization is dynamic and only relevant to the current hospitalization. It does not necessarily hold true for the next hospitalization unless the patient has signed a POLST or on discussion with your patient, he/she reiterates his/her desired code status. Upon discharge, a POLST form should be completed in an effort document goals of care. The pink original goes with the patient and a copy should be placed in the chart for scanning into CERNER.

PLACING CONSULTS

Decisions to consult a different service should always be discussed with the attending of the team. The consultant can be reached either through the operator (dial "0" from any hospital phone) or through QGENDA. Remember to be courteous when calling the consult and have a well-defined question for your consultants. To give your consults enough time to see your patients, please try placing consults as early in the day as possible.

PROCEDURES

Prior to performing any procedure, an informed consent must be obtained and placed in the patient chart. If a translator is used to obtain consent, this must be documented. For any procedure, residents must be supervised by an attending physician or a senior resident until they have logged 5 instances of performing said procedure in MyEvaluations. Procedures that require attending supervision regardless of the number of times the resident has performed the procedure include central line placement and thoracenteses. Interns and residents will have the opportunity to perform basic procedures including but not limited to: lumbar puncture, thoracentesis, paracentesis, arterial blood gas, and venipuncture. In addition, interns and residents may have the opportunity to perform arterial and central venous line placement under supervision of a procedurally credentialed physician.

DEATH

Deaths must be pronounced by a licensed provider on the primary team. All in-hospital deaths require a Death Summary to be written by the primary team. If a death is pronounced by the overnight cross-covering resident, he/she may write a brief Death Note to document the circumstances and death exam; however, a Death Summary still needs to be completed by the primary team.

Deaths in the hospital are not uncommon, but may be an emotionally challenging experience. Housestaff are encouraged to discuss the experience of caring for a patient who has died with the team and/or chief residents.

DOCUMENTATION

All documentation must be completed electronically in CERNER. Each note needs to end with "Discussed with Attending Dr. [Name]" and be forwarded to the attending on service for the day for review.

History & Physical

H&Ps must be written and signed by the attending within 24 hours of admission. The assessment and plan of each note should be systems and problem based. Be sure that these problems include detailed descriptions (i.e. acute vs chronic hypercapneic vs hypoxemic respiratory failure). In CERNER, the note type, "History and Physical" should be used.

Daily Progress Note

A daily progress note must be completed for each patient unless an H&P or Discharge Summary will be written for the day of admission or day of discharge. The assessment and plan of each note should be systems and problem based. Be sure that these problems include detailed descriptions (i.e. acute vs chronic hypercapneic vs hypoxemic respiratory failure). Daily progress notes must be forwarded for evaluation to the attending of the team. In CERNER, the note type, "ICU Inpatient Progress Note" should be used.

Discharge Summary

Discharge Summaries are required for any discharge from the hospital and should be completed within 24-48 hours of discharge. This includes discharges against medical advice or elopements. In CERNER, the note type, "Discharge summary" should be used. Discharge summaries should include the following:

- Admission date
- Discharge date
- Procedures or surgeries
- Consulting services
- Summary of hospital course
- Discharge diagnoses and medication
- Follow-up plan

Transfer Summary

A Transfer Summary is required when the patient is being transferred to another service (medicine wards, surgical service) or to another facility. The transfer summary should follow the format of the Discharge Summary above. In CERNER, the note type, "Transfer Summary" should be used.

Death Summary

A Death Summary is required when a patient expires in the hospital. The Death Summary should follow the format of the Discharge Summary above. In CERNER, the note type, "Death Summary" should be used.

MEDICAL RECORD DOCUMENTATION QUERIES

You may receive a message in your CERNER inbox from Medical Records inquiring about specific diagnoses. Please make sure to respond to all messages in a timely fashion as it affects hospital funding.

ROTATION-SPECIFIC DETAILS

Below are some reference articles for common diseases seen on this rotation.

- Aaron S. Management and prevention of exacerbations of COPD. *BMJ* 2014;349:g5237
- Agnely G and Becatini C. Acute Pulmonary Embolism. *N Engl J Med* 2010;363:266-74.
- Baddour L, Wilson W, Bayer A et al. Infective Endocarditis in Adults: Diagnosis, Antimicrobial Therapy, and Management of Complications. *Circulation*. 2015;132:00-00.
- Barr J, Fraser GL, Puntillo K et al. Clinical Practice Guidelines for the Management of Pain, Agitation, and Delirium in Adult Patients in the ICU. *Crit Care Med* 2013. 41: 263-306.
- Dellinger, RP, Schorr CA, Levy, MM. A Users' Guide to the 2016 Surviving Sepsis Guidelines. *Crit Care Med* 2017; 1-5.
- Ferguson, ND, Fan, E, Camporota, L et al, The Berlin Definition of ARDS: an expanded rationale, justification, and supplemental material. *Intensive Care Med*, 2012, 38: 1573-1582.
- Gelder I, Hagens V, Bosker H. A Comparison of Rate Control and Rhythm Control in Patients with Recurrent Persistent Atrial Fibrillation. *N Engl J Med* 2002;347:1834-40
- Jobin S, Kalliainen L, Adebayo L, et al. Venous thromboembolism prophylaxis. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2012 Nov
- Mandell L, Wunderink G, Anzueto A et al. Infectious Diseases Society of America/American Thoracic Society Consensus Guidelines on the Management of Community-Acquired Pneumonia in Adults. *Clinical Infectious Diseases* 2007; 44:S27-72
- Mermel L, Allon M, Bouza E et al. Clinical Practice Guidelines for the Diagnosis and Management of Intravascular Catheter-Related Infection: 2009 Update by the Infectious Diseases Society of America. *Clinical Infectious Diseases* 2009; 49:1-45
- Schmidt GA, Girard TD, Kress JP, et al. Official Executive Summary of an American Thoracic Society/American College of Chest Physicians Clinical Practice Guideline: Liberation from Mechanical Ventilation in Critically Ill Adults. *Am J Respir Crit Care Med*. 2017, 195(1):115-119.
- Vincent J-L, DeBacker D. Circulatory Shock. *NEJM*, 2013, 369:1726-1734.
- Yancy C, Jessup M, Bozkurt B et al. 2013 ACCF/AHA Guideline for the Management of Heart Failure. *Circulation*. 2013; 128: e240-e327
- Kidney Disease: Improving Global Outcomes (KDIGO) Acute Kidney Injury Work Group. KDIGO Clinical Practice Guideline for Acute Kidney Injury. *Kidney inter., Suppl.* 2012; 2: 1-138. And Evaluation and Management of Chronic Kidney Disease. *Kidney inter., Suppl.* 2013; 3: 1-150