

Rural Hospital Medicine Educational Goals & Objectives

The Rural Hospital Medicine rotation takes place in our nonprofit, community-based acute care facility in Ojai, California. This critical access hospital has 37 beds and a 24-hour standby Emergency Room. This elective rotation will provide the resident with an opportunity to evaluate and manage patients with common acute medical conditions. While some specialized services are available, the focus is on training the resident to provide comprehensive clinical care in a more limited environment. Residents will also become familiar with the benchmarks standard in hospital medicine, including transitions of patient care, cost of care, quality measures and patient safety.

Faculty will facilitate learning in the 6 core competencies as follows:

Patient Care and Procedural Skills

- I. All residents must be able to provide compassionate, culturally-sensitive direct care for acutely ill patients.
 - PGY1s will learn when and how to seek directed and appropriate specialty consultation. When not available, PGY1s will learn how to appropriately use telephone consultation.
 - PGY2s will understand criteria for different levels of care within the hospital (e.g. ICU, DOU, telemetry, etc.) and learn the criteria for necessary transfer of patients between facilities to further patient care.
 - PGY3s should supervise and ensure seamless transitions of care within the hospital and at discharge. For patients requiring facility transfer, PGY3s will learn to stabilize patients prior to transfer and the criteria for physician-accompanied transfer.

- II. Residents will demonstrate the ability to take a symptom-driven history and perform a focused physical exam.
 - PGY1s should be able to differentiate ill from stable patients and appreciate abnormal physical findings, particularly abnormal heart and lung sounds, focal neurologic abnormalities, and rashes.
 - PGY2s should be able to collect complex historical information from electronic and/or outside records, elicit a more thorough history, and detect subtle findings, such as a grade I-II murmur, organomegaly, and lymphadenopathy.
 - PGY3s should be able to independently obtain a complete history, use physical exam maneuvers to elicit physical findings, and understand the sensitivity and specificity of physical findings.

- III. Residents are encouraged to take advantage of opportunities to perform indicated procedures on their hospitalized patients. The goal is for residents to become competent in the safe and effective use of these procedures and to perform them with gradually increasing independence.

All residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures:

- PGY1s: arterial and central line placement, thoracentesis, paracentesis and lumbar puncture
- PGY2s: basic noninvasive ventilation, intubation
- PGY3s: trouble shooting for noninvasive ventilation and mechanical ventilation

In addition, residents will demonstrate knowledge of and be able to counsel patients and/or families regarding the indications and contraindications for the following procedures:

- PGY1s: acute hemodialysis, mechanical ventilation, PEG placement, and transfusion
- PGY2s: withdrawal of care
- PGY3s will be able to independently counsel patients on the above issues in the setting of complex socio-medical circumstances, such as the issue of PEG placement in demented patients, or mechanical ventilation in the setting of end-stage systemic illness.

Medical Knowledge

I. PGY1s will develop an understanding of the pathophysiology and approach to common complaints in hospitalized patients, such as:

- Acute abdominal pain
- Altered mental status
- Chest pain
- Cough and Dyspnea
- Diarrhea
- Edema
- Electrolyte abnormalities
- Fever
- Gastrointestinal bleeding
- Hypertensive urgency
- Rash
- Syncope
- Weakness
- Weight loss

PGY2s should be able to incorporate this information into the context of past medical history and risk factors to generate a differential diagnosis and a more thorough plan of care.

PGY3s should also be able to understand statistical concepts such as pretest probability, number needed to treat, etc. and their effect on diagnostic workup and treatment.

- II. All residents should be able to manage hospitalized patients with evidence-based therapies with gradually increasing independence, including patients with the following illnesses:
- Acute renal failure
 - Asthma exacerbation
 - Cellulitis
 - CHF
 - Common arrhythmias
 - COPD exacerbation
 - Diabetes management
 - Deep venous thrombosis and pulmonary embolus
 - Non-STE-Acute Coronary Syndrome (triage, and treatment of patients managed noninvasively)
 - Pancreatitis
 - Perioperative care
 - Pneumonia, community-acquired and health-care associated
 - Seizure
 - Stroke
- III. Residents will become knowledgeable in the following issues pertaining to hospital care:
- ACLS protocols (All residents)
 - Enteral and parenteral nutrition and PEG tube placement (PGY2)
 - Palliative care (PGY2)
 - National guidelines for prevention of catheter-associated blood stream infections, deep venous thrombosis, and stress ulcer prophylaxis. (PGY3)
- IV. Residents will be able to understand the indications for ordering and interpretation of results from laboratory and diagnostic studies, including:
- For PGY1s:
- Complete blood count with differential and chemistries
 - Drug levels (where appropriate)
 - Arterial blood gas
 - Analysis of sputum
 - Urinalysis and urine toxicology screen
 - Chest and abdominal radiographs
 - Echocardiogram
 - EKGs and continuous EKG tracings
 - NT-pro-BNP
- For PGY2s
- Interpretation of acid-base status from arterial blood gases
 - Analysis of cerebrospinal, peritoneal, and pleural fluids
 - Computed tomography and magnetic resonance imaging of head, chest and abdomen

For PGY3s

- Independently planning diagnostic evaluation and appropriate therapeutic interventions based on test results

Practice-Based Learning and Improvement

- I. All residents should be able to access current clinical practice guidelines from the Society of Hospital Medicine, journals, and other sources to apply evidence-based strategies to patient care.
- II. PGY2s should develop skills in evaluating studies in published literature, through Journal Club and independent study.
- III. All residents should learn to function as part of a team, including the hospitalist, nurse, pharmacist, and dietician, and social worker to optimize patient care, and PGY3s should take a leadership role.
- IV. All residents should respond with positive changes to feedback from members of the health care team.

Interpersonal and Communication Skills

- I. PGY1s must demonstrate electronic and verbal communication skills that facilitate the timely and effective exchange of information within the system.
- II. PGY2s must also demonstrate interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- III. PGY3s should demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- IV. PGY3s must become proficient in managing social dynamics, including identifying the power of attorney or surrogate decision maker, resolving conflict among family members with disparate wishes, and patient advocacy.

Professionalism

- I. All residents must demonstrate strong commitment to carrying out professional responsibilities as reflected in their conduct, ethical behavior, attire, interactions with colleagues and community, and devotion to patient care.
- II. PGY1s should be able to educate patients and their families in a manner respectful of gender, age, culture, race, religion, disabilities, national origin, socioeconomic status, and sexual orientation on choices regarding their care.
- III. PGY2s should be able to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- IV. PGY3s should be able to provide constructive criticism and feedback to more junior members of the team.

Systems-Based Practice

- I. PGY1s must have a basic understanding that their diagnostic and treatment decisions involve cost and risk and affect quality of care.
- II. PGY2s must be able to discuss the cost and risks involved in alternative care strategies and articulate current quality issues in Hospital Medicine.
- III. PGY3s must demonstrate an awareness of and responsiveness to established quality measures, risk management strategies, and cost of care within our system.

Teaching Methods

- I. Supervised patient care in the hospital
 - Residents will initially be directly observed with patients, to facilitate the acquisition of excellent history taking, physical exam, and procedural skills.
 - As residents become more proficient, they will interact independently with patients and present cases to faculty.
 - For PGY1s, initial emphasis will be on diagnosis and basic management.
 - For more senior residents, focus will be on medical decision-making, and residents will work with supervising physicians to finalize a care plan.
- II. Research
 - All residents must engage in scholarly work in accordance with their College requirements. Residents are encouraged to engage in outcomes research through our QI department, mentored by faculty. If pursued, results should be presented to hospital staff and if possible, as an abstract at a professional meeting.
- III. Conferences
 - Multidisciplinary work rounds
 - Specialty-specific didactics
- IV. Independent study
 - Journal and Textbook reading
 - *Understanding Patient Safety* (McGraw-Hill Education, 3rd Edition, 2017)
 - *Hospital Medicine* (Lippincott Williams & Wilkins, 2005)
 - *MKSAP*
 - Additional reading as recommended by the Hospitalist team
 - Online educational resources
 - CDC's Rural Health page <https://www.cdc.gov/ruralhealth/>
 - Pain management and addiction: <https://www.hhs.gov/opioids/treatment/overdose-response/index.html>
 - NIH webpage on rural health services research-related guidelines, journals, and publications

https://www.nlm.nih.gov/hsrinfo/rural_health.html#635Guidelines,
Journals, Other Publications

- Up To Date
- Clinical Key

Evaluation

- I. Case and procedure logs
- II. Mini-CEX bedside evaluation tool
- III. In-service Exam
- IV. Verbal mid-rotation individual feedback
- V. 360 Evaluation (OVH staff will be asked to complete this evaluation at the end of the rotation)
- VI. Attending written evaluation of resident at the end of the month based on rotation observations and chart review.

Rotation Structure

- I. Residents should contact Dr. Constantine the day prior to determine start time and location.
- II. Residents should spend the majority of their time admitting, rounding or consulting on patients in the hospital, with the exception of required conferences or patient-related time elsewhere in the hospital.
 - Rotations are a “hands-on” learning experience. If you have a resident, send them to see a patient. Try to let them do a majority of the procedures.
 - Case-based learning is very effective. Give your resident patient-based questions to research and report back to you.
 - Consider having your resident do a short presentation on a pertinent topic.
 - When doing consults, ensure the resident understands the question asked and provides a concise answer.
- III. Call and weekend responsibilities TBD by the hospitalist
 - Hours worked must be consistent with ACGME requirements and are subject to approval by the Program Director.
- IV. Residents have specialty-specific didactics and should be excused in a timely fashion to attend.