Hospital Medicine – Night Medicine Rotation Educational Goals & Objectives

The Night Medicine rotation provides a unique opportunity for resident learning. Residents have fewer administrative duties and greater opportunity to approach clinical problems independently. They also have to meet the challenges of providing cross-cover care for patients less familiar to them, cope with increased fatigue, and understand when to seek faculty input in a setting where fewer faculty is generally present. The Night Medicine service will provide upper level residents with an opportunity to evaluate and manage patients with common acute medical conditions. Focus will be on the triage of acute care issues, the development of a stepwise, analytical approach to clinical problems; response to codes; time management; and safe, thorough transition of care to the oncoming team.

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.
- PGY2s should be able to evaluate acute complaints and seek appropriate specialty consultation when necessary to further prompt patient care.
- PGY3s should be able to prioritize new admissions, acute patient issues, and changes in patient status.

II. Residents will demonstrate the ability to take a symptom-driven history and perform a focused physical exam.
- 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. For procedural competence, the focus for resident education is on the following:
- understanding the indications and contraindications of procedures
- recognizing and managing complications
- pain management
- sterile technique
- specimen handling
- interpretation of results
- requirements and knowledge to obtain informed consent

During the night medicine rotation, PGY2s will focus on the following procedures as permitted by case mix:

Know, Understand, and Explain					**Perform Safely and Competently**
Procedure	**Indications; contraindications; recognition & management of complications; pain management; sterile technique**	**Specimen Handling**	**Interpretation of Results**	**Requirements & Knowledge to Obtain Informed Consent**	
Abdominal paracentesis	X	X	X	X	
ACLS	X	n/a	n/a	n/a	PGY1
Arterial line	X	n/a	X	X	
Arthrocentesis	X	X	X	X	
Central line	X	X	X	X	
Drawing venous blood	X	X	X	n/a	PGY1
Drawing arterial blood	X	X	X	X	PGY1
EKG	X	n/a	X	n/a	
I&D abscess	X	X	X	X	
Lumbar puncture	X	X	X	X	
Nasogastric intubation	X	X	X	X	
Placing a peripheral venous line	X	n/a	n/a	n/a	PGY1
Pulmonary artery catheter placement	X	n/a	X	X	
Thoracentesis	X	X	X	X	

- All residents will build on skills learned during the PGY1 year
- PGY2s are also encouraged to develop skills in the use of noninvasive ventilation
- PGY3s are also encouraged to develop skills in the use of ultrasound to facilitate the performance of clinical procedures (e.g. thoracentesis) and/or to supplement clinical judgment (volume assessment, EF)
- Residents who wish to pursue additional procedural competencies or further their exposure to above-listed procedures are encouraged to work with faculty to

ensure adequate opportunity to acquire the skills to safely practice those procedures independently.

In addition, residents will be able to counsel patients and/or families regarding indications and contraindications of acute hemodialysis, noninvasive and mechanical ventilation, PEG placement, and transfusion as well as:

- PGY2s: conveying information on palliative care and hospice appropriate to the patient and family's level of understanding and acceptance
- PGY3s: 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. PGY2s will be able to generate a differential diagnosis and plan for care based on an understanding of the pathophysiology for the following common presenting complaints in hospitalized patients:

- 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

II. PGY3s should be able to understand statistical concepts, such as pretest probability, number needed to treat, etc. and their effect on diagnostic workup and treatment. PGY3s should be able to independently manage hospitalized patients with evidence-based therapies, including patients with the following illnesses:

- Acid-base and electrolyte abnormalities
- Acute renal failure
- Asthma exacerbation
- Cellulitis
- CHF
- Cirrhosis and liver failure
- Common arrhythmias
- COPD exacerbation

- Diabetes management
- Deep venous thrombosis and pulmonary embolus
- Hepatitis
- NSTEMI
- Pancreatitis
- Perioperative care
- Pneumonia, community-acquired and health-care associated
- Seizure
- Stroke

III. All residents will become familiar with ACLS protocols and other clinical protocols pertaining to hospital care:
- PGY2s: enteral and parenteral nutrition and PEG tube placement; national guidelines for prevention of catheter-associated blood stream infections, deep venous thrombosis prophylaxis and treatment, and stress ulcer prophylaxis.
- PGY3s: should be able to apply guidelines in complex settings, such as family request for PEG tube placement in the setting of advanced dementia

IV. Residents will be able to understand the indications for ordering and interpretation of results from laboratory and diagnostic studies, including:

PGY2s
- Analysis of cerebrospinal, peritoneal, and pleural fluids
- Interpretation of the clinical significance of ECG and echocardiogram results
- Interpretation of acid-base status from arterial blood gases
- Interpretation of serologies, chemistries, sputum, urinalysis, and culture results within the clinical context
- Computed tomography and magnetic resonance imaging of head, chest and abdomen

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, Clinical Key, 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, with PGY3s assuming 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. PGY2s must also demonstrate interpersonal skills that facilitate collaboration with patients, families, and other health professionals.
II. PGY3s should demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
III. 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. PGY2s should be able to counsel patients and families on diagnostic and treatment decisions and on use of palliative care and hospice in a manner respectful of cultural and religious beliefs.
III. PGY3s should be able to provide constructive criticism and feedback to more junior members of the team.

Systems-Based Practice

I. PGY2s must be able to discuss alternative care strategies and the cost and risks involved and articulate current quality issues in Hospital Medicine.
II. 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. Faculty teaching focus is on critical thinking and medical decision-making, and residents work with supervising physicians to finalize a care plan.
- Faculty will review brief case-based scenarios as time permits with a focus on differential diagnosis, diagnostic strategy and pitfalls, and management.

II. Independent study
Residents have the following resources available:
- *Understanding Patient Safety* (McGraw-Hill's Lange Series, 2017)
- *Principles and Practice of Hospital Medicine* (McGraw-Hill, 2016)
- Pain management and addiction:
    - HHS How to Respond to an Opioid Overdose
    - ACP Chronic Pain and Safe Opioid Prescribing
    - CA Bridge Resources
- *MKSAP*
- Up To Date
- Clinical Key

Evaluation

I. Procedure logs
II. Mini-CEX bedside evaluation tool
III. In-service Exam
IV. 360 Evaluation
V. Verbal mid-rotation individual feedback
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 the lead hospitalist 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. Downtime should be used for self-study.
- Rotations are a "hands-on" learning experience. Residents are the primary care providers for hospitalized patients and are expected to do a majority of the procedures. Direct observation of residents with real-time feedback is emphasized.
- Case-based learning is very effective. Attendings should provide residents with patient-based questions to research and report back.

III. Residents on Swing Shift will work from 7:00 pm to 12:00 am and should aim to see at least 3 admissions per shift.
IV. Hours worked must be consistent with ACGME requirements and are subject to approval by the Program Director.