

## **Curriculum on Hospital Medicine Danbury Hospital Internal Medicine Residency Program**

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### **A. Educational Purpose and Goals**

Hospital Medicine has emerged as the fastest-growing, site-defined specialty, which requires proficiency in interrelated aspects of practice – clinical, procedural, and system-based competencies.

The purpose is to introduce and familiarize the resident with Hospital Medicine and the role of the Hospitalist as a Medical Consultant. It should also provide an understanding of the essential knowledge, skills and attitudes expected of physicians working as Hospitalists. Core competencies in Hospital Medicine include the most common and fundamental elements of inpatient medical care without exhaustively listing every clinical entity encountered. Hospitalists subscribe to systems organizational approach to clinical management and processes of care within the hospital. This systems approach, more than any level of knowledge or skill, is required to effectively and efficiently practice in the hospital setting.

1. The goal on this rotation is gaining clinical experience with acute and chronic disease management in surgical patients, especially lung disease, heart disease, diabetic mellitus, hypertension and peripheral arterial disease.
2. Develop and strengthen knowledge, attitudes and skills in Perioperative Medicine.
3. Develop and strengthen knowledge, attitudes and skills in Observation Medicine.
4. Develop and strengthen knowledge, attitudes and skills in Palliative Care Management.

#### **Perioperative Medicine:**

Perioperative medicine refers to the medical evaluation and management of patients before, during and after surgical intervention. In the United States, over 44 million patients undergo non-cardiac surgery each year. The annual cost of perioperative cardiovascular morbidity is more than \$20 billion. Hospitalists perform general medical consultation preoperatively and provide postoperative medical management. Optimal care for the surgical patient is realized with a team approach that coordinates the expertise of the Hospitalist and the surgical team. Hospitalists apply practice guidelines to medical consultation and can lead initiatives to improve the quality of care and patients safety in the perioperative period.

Attached please find core competencies required during the Hospital Medicine rotation: ‘Perioperative Medicine’, Palliative Care’, ‘Hospitalist as Consultant’, and ‘Observation Unit Management’.

## **B. Teaching Methods**

1. The resident will see inpatient consults independently, and present the details to the Attending Hospitalist. The resident will formulate his own differential diagnosis, management plan, and discuss these aspects with the Attending Hospitalist.
2. The Hospitalist will provide didactic sessions to the resident based on their cases.
3. The resident will review medical literature and present the key finding of the article at the Hospitalist weekly section meeting. The relevant topic will be decided at the beginning of the rotation.
4. The resident will perform a Palliative Care consult under the supervision and guidance of Karen Mulvihill, APRN, and/or a Hospitalist.

## **C. Educational Content**

1. Mix of Diseases  
Refer to the Core Curriculum
2. Patient characteristics  
These consultations are performed on inpatients, and these patients range in severity, but tend to be acutely ill with multi-organ system processes. The age range is 16 through 100+, and is both genders and various ethnicities.
3. Types of clinical encounters  
The consultation sometimes starts in the Emergency Department, but frequently occur at the bedside on Surgical Units. Sometimes, consults start in the Recovery Room or Observation Unit
4. Procedures and services  
The consult service will not evaluate for procedure related competencies.
5. Reading lists, other educational resources  
These are the topics for Reading List section of our curriculum:  
Journal of Hospital Medicine (Society of Hospital Medicine)  
Go to UpToDate online 13.1, enter “Preoperative Evaluation”
  - Overview of the principles of medical consultation
  - Preoperative medical evaluation of the health patient
  - Assessing surgical risk in patients with liver disease
  - Carotid endarterectomy: Preoperative evaluation; surgical technique; and complication
  - Estimation of coronary risk before noncardiac surgery
  - Evaluation of preoperative pulmonary risk
  - Identification and management of alcohol use disorders in the perioperative period
  - Management of anticoagulation before and after elective surgery

- Management of high-risk patients with vascular disease prior to major noncardiac surgery
- Medical consultation for electroconvulsive therapy
- Medical consultation for patients with hip fracture
- Medical management of the dialysis patient undergoing surgery.
- Noninvasive cardiac diagnostic testing of patients with vascular disease prior to major noncardiac surgery
- Overview of the management of postoperative pulmonary complications
- Perioperative care of the surgical patient with neurological disease
- Perioperative heart failure in noncardiac surgery
- Perioperative management of diabetes mellitus
- Perioperative management of hypertension
- Perioperative medication management
- Preoperative assessment of hemostasis
- Preoperative evaluation and perioperative management of patients with rheumatic diseases
- Risk stratification of patients with vascular disease prior to major noncardiac surgery
- Strategies to reduce postoperative pulmonary complications
- The surgical patient taking corticosteroids
- The surgical patient with valvular heart disease
- Postoperative fever
- Complications of bariatric surgery
- Issues relating to the renal allograft recipient undergoing non-transplant surgery

#### **D. Method of Evaluation of Resident and Faculty Competence**

The resident will meet with the Medical Director, Dr. Damanjeet Chaubey at the beginning and end of the rotation.

The resident will receive direct feedback at the end of the rotation from either Dr. Damanjeet Chaubey, Dr. Komron Ostovar or Dr. George Northop.

After each block rotation faculty provide a review of the resident's competency based performance on Evalue. In turn the resident evaluates the faculty's performance as well as the rotational experience. These evaluations are reviewed during our biannual House staff evaluation committee meetings.

#### **E. Rotation Specific Competency Objectives**

Please refer to the Core Curriculum for the expected General Medicine Curriculum core competency objectives. The rotation specific objectives are provided below.

The resident will be observed closely by the Faculty regarding their competency in the following categories:

1. Patient care

- Elicit a thorough history, review the medical record and inquire about functional capacity in patients undergoing surgery.
- Perform targeted physical examination, focused on the cardiovascular and pulmonary systems and other systems based on patient history.
- Perform a directed and cost effective diagnostic evaluation based on patient relevant history and physical examination findings.
- Employ published algorithms and validated clinical scoring systems, when available, to assess and risk stratify patients.
- Assess the urgency of the requested evaluation and provide feedback and evaluation in an appropriate timeframe.
- Recognize medical conditions that increase risk for perioperative complications and make specific evidence based recommendations to optimize outcomes in the perioperative period.
- Determine the perioperative medical management strategies require to address specific disease states.
- Reassess patients for postoperative complications and make medical recommendations as indicated.

2. Medical knowledge

- Explain the effect of anesthesia and surgical intervention on physiology.
- Explain the goals and components of preoperative risk assessment.
- Identify the patients who require selective preoperative testing based on patient specific factors, type of surgery, and urgency of surgical procedure.
- Describe risk factors for perioperative complications.
- Explain risks for perioperative complications in specific patient populations.
- Explain pharmacologic therapies that should be modified or held prior to surgery.
- List widely accepted risk assessment tools and explain their value and limitations in patients undergoing nonvascular surgery.
- Describe the evidence supporting prophylactic perioperative  $\beta$ -blockade.

3. Practice-based learning/improvement

- See the IM Core Competencies

5. Interpersonal/communication skills

- Communicate with patients and families to explain the Hospitalists role in their perioperative medical care, any indicated preoperative testing related to their medical conditions or risk assessment, and any adjustment of pharmacologic therapies.
- Communicate with patients and families to explain any indicated perioperative prophylactic measures.
- Communicate with patients and families to explain the need for follow-up medical care post-discharge.

- Initiate indicated perioperative preventive strategies.
  - Recommend specific prophylactic measures, which may include  $\beta$ -blockade, VTE prophylaxis, or aspiration precautions, to avoid complications in the perioperative period.
  - Serve as an advocate for patients.
  - Promote a collaborative relationship with surgical services, which includes effective communication.
  - Assess pain in perioperative patients and make recommendations for pain management when indicated.
  - Facilitate discharge planning early in the hospitalization, including communicating with the primary care provider, and presenting the patient and family with contact information for follow-up care.
  - Utilize evidence based recommendations for the evaluation and treatment of patients in the perioperative period.
4. Professionalism  
See the IM Core Competencies
5. System-based practice
- Participate in multidisciplinary efforts to develop clinical guidelines, protocols and pathways to improve the timing and quality of perioperative care from initial preoperative evaluation through all care transitions.
  - Participate in efforts to improve the efficiency and quality of care through innovative models, which may include co-management of surgical patients during the perioperative period.
  - Participate in multidisciplinary initiatives to promote patient safety and optimize diagnostic and management strategies for surgical patients requiring medical evaluation.
  - Participate in multidisciplinary protocols to promote the rapid identification, triage, and expeditious evaluation of patients requiring urgent operations.