# Rotation: Adult Inpatient Medicine

Duration of Rotation(hours):

Contact Person: Christopher Bernheisel

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Supervision: (How it occurs): Dr. Bernheisel, Jeff Schlaudecker, Jeff Morgeson, and Megan Rich round with residents daily, review notes, and see patients. During rounds, the resident will either present the patient to the attending at the table, or the patient will be presented at the bedside in the "Family Centered Rounds" format. The residents' interpersonal and communication skills and professionalism are directly supervised in the Family Centered Rounding format. Direct feedback and interventions are provided following patient encounters. The attending call schedule along with contact information is posted on the internal website, along with in the resident work room. All interns have indirect supervision with direct supervision immediately available by an upper level resident or attending. Upper level residents have indirect supervision with direct supervision available by the

# RRC Requirements:

3. The program should implement a plan to ensure that residents retain their identity and commitment to the principles and philosophic attitudes of family medicine throughout the training program, particularly while they rotate on other specialty services. Residents must have on-site supervision by an appropriatelyqualified member of the program's faculty when the services or procedures needed exceed the capability of the most senior supervising resident, or when qualified senior residents are unavailable for supervision of more junior residents. While the content of a rotation is more important than the time assigned to it, it is necessary to establish guidelines for the allocation of time segments to provide an objective measure of the opportunity provided for residents to achieve the cognitive knowledge, psychomotor skills, attitudinal orientation, and practical experience required of a family physician in each of the curricular elements. Time spent in the FMC seeing continuity patients may not be included when calculating the duration of the specialty rotations for which a duration is specified. It is understood, however, that FMC time is included in the required rotations that are specified in months. A program that uses a longitudinal format instead of a block rotation must document 100 hours of structured experience in lieu of a block month.

# 4. Inpatient Experiences for Family Medicine Residents

The resident **must** develop the skills required to treat male and female patients of all ages and those having various levels of severity of illness who are hospitalized. In-patient care **must** include the continuity of care of adults and children from the residency patient panel. This inpatient experience **should** occur primarily on a family medicine or an internal medicine service, and **must** involve teaching and role-modeling by family physician faculty. Daily faculty rounds **must** occur to

assure appropriate supervision and teaching. Each resident must also receive clinical experience caring for hospitalized patients in special care units including medical intensive care, coronary care, and newborn nursery. Additional experience will occur on other inpatient services. The length, breadth, and intensity of the experience must assure that every resident becomes competent diagnosing and managing common inpatient problems of adults and children as seen by the family physician. Residents must demonstrate direct management of patients to include initial evaluation, admission of patients, repeat evaluations, development of a plan of care, ongoing management, performance of basic procedures of medicine, appropriate consultation and discharge planning and continuing care. Residents must demonstrate the ability to write appropriate admitting orders and to modify them daily according to changes in the patient's condition. Residents are expected to maintain involvement in the care of their hospitalized patients whenever possible, even if the program uses the services of hospitalists. The residency must foster a team system that ensures continuity of care from the patient's perspective when the primary resident is unable to be present in both inpatient and outpatient settings. The continuity resident is expected to communicate daily with the hospital resident, and to provide long-term continuity care after discharge. The residency must define and monitor the most common medical problems cared for by family physicians in the hospital where inpatient experience takes place. Residents must receive ample clinical experience in caring for these problems. There must also be a didactic curriculum that covers these common medical problems. This list of common diagnoses should be generally consistent with national data that are published about family medicine. The program must document how the residents' skills are progressing from care that is dependent on supervision by faculty toward unsupervised, independent care at the time of graduation. The program must also document the residents' competency in providing supervision to others in a learning environment. Upon completion of training, residents must be competent to provide hospital care. Assessment of resident hospital practice must be included in the required semiannual resident evaluation. By the conclusion of the residency, residents should have developed competence in knowledge, attitudes, and skills to care independently for hospitalized patients without supervision, and to utilize appropriate consultation by other specialists. Procedural skill documentation should indicate when the resident is capable of independent performance of the procedure.

a) Adult Medicine

The adult medicine experience must total 8 months, of which 6 are inpatient. The following curricular areas must be included in either longitudinal or block format: cardiovascular, neurologic, endocrinologic, pulmonary, gastrointestinal, rheumatologic, infectious, nephrologic, and hematologic diseases. Residents must receive instruction and clinical experience in the prevention, counseling, detection, diagnosis and treatment of gender-specific diseases in women and men.

#### (1) Women's Health

This **must** include structured experience in non obstetrical/gynecologic care of women that deals with the study of gender differences and the diversity of women's health needs throughout the life cycle. Woman's health conditions are those that are unique or more common to women, including disorders that differ in presentation or treatment of women.

(2) Inpatient

While caring for adults on the inpatient service, each resident is expected to manage the care of at least 5 patients, on average, at any one time. Senior residents who are functioning in a supervisory role may have direct responsibility for a smaller number of patients.

# **Content Areas Covered:**

Top 12 problems seen in this area for FP's

- 1. COPD
- 2. Acute Decompensated Heart Failure
- 3. Skin and Soft Tissue Infections
- 4. Acute Coronary Syndrome
- 5. Acute Renal Failure
- 6. Perioperative Cardiac Management
- 7. CVA/TIA
- 8. Delirium
- 9. Pneumonia (CAP, HCAP, and HAP)
- 10.VTE including pulmonary embolism
- 11.A Fib
- 12.Syncope
- 13.EBM
- 14. Transition of Care

# Specific Educational Strategies:

# **Teaching Methods:**

A. Orientation

1. Beginning of Year orientation

Resident Presentations: Discussion/lecture on presenting an H&P utilizing the two paragraph method to each resident class. Introduction to EBM (see lecture objectives) Presentation: Review the three types of presentations, introduction to Family Centered Rounding, including role playing. Introduction to Transitions of Care Introduction to Supervision (Medical Student and Resident)

2. Monthly Orientation

Topic reviewed prior to each month by email and a noon discussion.

- B. EBM Morning
  - 1. Four times in the month, a resident on the inpatient team will lead a 10–15 minute EBM presentation. Prior to the session, the resident will develop a clinically answerable question utilizing the PICO format, utilize available resources to identify an answer, and critically review the information found. The morning report will concentrate on the process along with the answer found. Possible discussion points could be based

upon the development of the question, the challenges in finding the answer, or the critical appraisal.

- C. Assessment Methods
  - 4. Immediate feedback to be provided by the attending following presentations and patient encounters.
  - 5. In family centered rounds, the residents' have direct observation and feedback on interpersonal and communication, and professionalism competencies.
  - 6. Written checklist for transitions of care, with all hand-offs directly observed during the first week of the rotation.
  - 7. Face-to-face mid and end of the month evaluations.
  - 8. Written feedback on all H&P's.
  - 9. End of the month global assessment based upon the core competencies.

Teaching Methods for Specific Areas

### A. Atrial Fibrillation:

- 1. Noon Conference: Quiz format, single case presentation, and multiple case presentation are the main formats used to teach the basics of atrial fibrillation. The single case presentation format selects one case that best identifies the basic principles regarding management of atrial fibrillation. The multi-case format utilizes a varied approach to management of atrial fibrillation in different scenarios. The quiz format is a simple question-answer format that highlights the major definitions, diagnosis, and management modalities for atrial fibrillation.
- 2. Online Quiz: Each resident completes an Atrial Fibrillation quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

# B. COPD:

- 2. Noon Conference: Basic lecture format and case-based scenarios are the main modalities used to teach the essentials of chronic obstructive pulmonary disease. The lecture format incorporates the fundamental teaching points for COPD including definitions, pathophysiology, diagnosis, and treatment options. The case-based scenarios provide a basic case or two as examples of hospital management of COPD exacerbations.
- 3. Online Quiz: Each resident completes a COPD quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

# C. Soft Tissue Infections:

- 1. Noon Conference: Multiple case scenarios with photographs, comprise the main modality used to teach the pertinent aspects of soft tissue infections. This method offers differing scenarios the resident may see in the office and appropriate outpatient treatment options for each scenario. Key points include reasons for hospitalization and alternative inpatient options for treatment.
- 2. Online Quiz: Each resident completes a Skin and Soft Tissue's quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

#### D. Syncope:

1. Noon Conference: Quiz and basic lecture are the main formats used to teach the key points of syncope. Both formats focus on the major causes underlying the morbidity and mortality related to syncope. Identification of associated risk factors, appropriate testing modalities, and therapeutic interventions also comprise the main teaching points.

2. Online Quiz: Each resident completes a Syncope quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

#### E. Delirium:

1. Noon Confernce: Various methods used to teach key points related to delirium including: PowerPoint lecture, Quiz, and 2 different case presentation styles, and a journal club. One case presentation style is a straightforward case requiring the identification of risk factors and management options. The other is a case requiring residents to identify common pitfalls of caring for fragile adults by identifying as many iatrogenic complications as possible in the vignette. The journal club includes a review by the residents of 4 articles on Delirium prevention, treatment, and prognosis and is accomplished during the noon conference time.

#### F. **ACS**:

- 1. Noon Conference: Quiz, lecture, and a case-based series of EKGs make up the different methods of teaching ACS. The lecture is predominantly based on white-board teaching aids that focus on risk assessment and treatment. The case series presents 5-7 different EKGs and clinical scenarios to residents and focuses on identification of the various types of ACS and how treatment differs.
- 2. Online Quiz: Each resident completes an online ACS quiz during their inpatient month, testing the medical knowledge objectives as detailed below.
- G. **CVA**:
  - Noon Conference: Quiz and case presentation make up the majority of teaching on CVA. Teaching points are based upon discussions with Dr. Jordan Bonomo, a local member of the Cincinnati Stroke Team. Dr. Bonomo and I worked to identify common mistakes made by primary care providers in the management of acute stroke and strive to correct misperceptions related to available treatments, work-up, and treatment timing.
  - 2. Online Quiz: Each resident completes an online CVA quiz during their inpatient month, testing the medical knowledge objectives as detailed below.
- H. Pneumonia:
  - 1. Noon Conference: PowerPoint presentation, case-based discussions, and quiz are the methods used to teach Pneumonia, including CAP, HAP, and HCAP. The powerpoint presentation is based on an acclaimed regional conference presentation and journal article written by Drs. Schlaudecker and Bernheisel. Case based discussions use 6 different clinical scenarios to prompt resident to identify pneumonia subtype and proper treatment drug and duration.
  - 2. Online Quiz: Each resident completes an online CAP quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

# L Acute Decompensated Heart Failure:

1.Noon Conference: Discussion and lecture concentrates on the underlying pathophysiology leading to acute decompensated heart failure. The residents are asked to draw the Starling's curve, and then assign where they are at in the curve and a patient with acute decompensated heart failure. With this knowledge, the residents work through how to improve the CO utilizing their

underlying pathophysiology. Following this cases are presented to practice. The underlying goal is to prevent the immediate "lasix" treatment, but instead thinking of the underlying pathophysiology which they can walk through during an actual patient encounter that may not be the straight forward "lasix" answer.

### J.**VTE:**

- 1.Noon Conference: Algorithm Based: The residents are given a quiz, first without an algorithm and then with the algorithm. Each question marches down a different pathway of the algorithm. The residents quickly realize that the questions are easier with the algorithm. The importance of having point of care information for easily confused topics is stressed.
- 2.Online Quiz: Each resident completes a VTE quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

# K. Periopeartive Cardiac Evaluation:

- 1. Noon Conference: Algorithm and Case based: 6 cases presented with quiz question on each case. Each case represents a different pathway on the perioperative algorithm. The evidence behind each pathway is discussed during the case leading down the pathway, along with the answers.
- 2. Online Quiz: Each resident completes a Perioperative Cardiac Evaluation quiz during their inpatient month, testing the medical knowledge objectives as detailed below.

# L. Acute Renal Failure:

1. Noon Conference: Lecture style presentation: Breaks down the topic into the three main categories of ARF: pre-renal, intrinsic, and post-renal (obstructive). Review diagnostic methods for each along with some treatments.

#### M. Stress tests

- 1. Noon Conference: Quiz and lecture style presentation, focusing on methods of testing and nuances of test selection.
- 2. Online Quiz: Each resident completes a Stress Test quiz during their inpatient month, testing the medical knowledge objectives as detailed below. The quiz format is a series of clinical scenarios designed to illustrate how to select an appropriate stress test, when to order imaging and why, and determining a patient's pretest probability. Also included in the post-test discussion of the quiz are atypical presentation of special populations (women), contraindications to various test methods, interpretation of test results and when to consult cardiology.

# **Recommended Resources for the Rotation:**

# **Electronic Resources**

- A. iPhone/iPod Touch: All from App Store
  - 1. Drug Database Resources
    - a. Epocrates: The gold standard for medications. Complete and auto-updates weekly. Along with medication information, also comes with an interactions program, tables, basic math program, and doc memos. Doc memos often seem to be greatly influenced by pharm companies.

- b.Medscape: Drug database is very similar to epocrates, but has more information than epocrates, especially with antibiotics (actually lists bacteria that are sensitive to the antibiotic) but still very easy to use. Also has a news section with summaries of the most recent articles. Free. You do need to sign up for medscape to use, but this is free to do.
- c. Skyscape: Program includes RxDrugs. Adequate resource that will include all of the basic information found in epocrates. Does not have pictures included. Excellent pricing guides, monitoring of levels section, and adequate dosing section. Biggest drawback is the lack of contraindications and adverse reactions section. Free
- 2. Clinical Point of Care Resources

a. UpToDate: Not in app store! Has an excellent web application that is quick and easy to use. Simply go to uptodate.com on iphone or iPod and you are there. Can place on home page. Must already have a subscription to uptodate to use.

b. 5-Minute Clinical Consultant: Excellent resource that provides a quick, concise overview of disease, treatments, medications, and differential. Not complete enough to be the only place to review a disease, but excellent for point of care use. Listed as free but requires a subscription to use, costing \$79.95/year.

c. Skyscape: Along with RxDrugs, also includes Outlines in Clinical Medicine a medical information program. Similar to 5-minute Clinical Consultant, reviews general information on disease states. Has excellent integration with other skyscape programs, including RxDrugs, calculators, and differentials that will link to other disease process. Does not seem to cover pediatrics or obstetrics. Excellent for point of care use. Free (without hidden, can purchase other skyscape programs in program, but the main items are free).

3. Medical Calculators

a. Mediquations Medical Calculator: Outstanding resource with currently has 211 formulas and scoring systems. The developer is a fourth year medical student and adds new features at least once a month. Easy to email developer with suggestions with quick response. Outstanding program. Will have almost all of the scoring systems and formulas used on the inpatient service.\$4.99 b. MediMath Medical Calculator: Similar to mediquations in most ways, but with fewer formulas/scoring systems (currently at 135). Excellent program. \$4.99

c. MedCalc: Free medical calculator with an excellent variaty also. Not as complete as the above, especially when compared to mediquations, but an excellent resource. Free

4. Other Resources

a. Eponyms: Excellent free eponym program. Can search by system or all. Free

b. Vaccines: Outstanding vaccine program. Will give current vaccines due, schedule, and catch-up. \$3.99

- c. iMurmur: Cool program that goes through all of the different types of murmurs. Can listen to each type of murmur. It is loaded with excellent information on each type of murmur and condition it may represent. \$0.99
- d. Preop: Simple program that walks you through the preoperative clearance. Written by a former faculty. FREE
- e. The EKG Guide (\$0.99) and Instant EKG (\$0.99): Both are outstanding resources, loaded with information and interactive quizzes. Instant EKG has movies of the different arrhythmia's, but otherwise they are pretty similar. Strongly recommend one of these applications.

5. Large number of medical applications on app store. Recommend mediquations, epocrates, and uptodate. The others are also excellent and are worth considering. Uptodate has a learning curve to use at point of care, with 5-minute clinical consultant or Skyscape likely superior for interns.

#### B. Palm

1. Drug Resources

a. Epocrates: The gold standard for medications. Complete and auto-updates weekly. Along with medication information, also comes with an interactions program, tables, basic math program, and doc memos. Doc memos often seem to be greatly influenced by pharm companies. <u>http://www.epocrates.com</u>/. Free

2. Clinical Point of Care

a. 5-Minute Clinical Consultant: Excellent resource that provides a quick, concise overview of disease, treatments, medications, and differential. Not complete enough to be the only place to review a disease, but excellent for point of care use. Available at: <u>http://www.skyscape.com/index/home.aspx</u> (\$69.95 1 year subscription) b. Cinci ACS: Developed by an Emergency Medicine resident at UC. Based on the 2007 AHA guidelines. It is designed to help clinicians manage Acute Coronary Syndrome including ST-Elevation Myocardial Infarction (STEMI), non-STEMI and Unstable Angina. Download from <u>http://handhelddoc.com/</u>. Free

c. Cinci Stroke: Developed by an Emergency Medicine resident at UC. Tool to assist clinicians with the acute management of ischemic and hemorrhagic stroke. Appears to be very extensive and complete. Based on the 2007 AHA guidelines. Download from <u>http://handhelddoc.com/</u>. Free

d. EM Rules: Developed by an Emergency Medicine resident at UC. This is a compendium of decision rules, calculators, scores and frequently forgotten tables designed for the Emergency Physician, but applicable to many other specialties as well. This is a free tool designed to help physicians risk-stratify patients and make point-of-care clinical decisions. This program was designed to be user-friendly and easy to navigate. Additionally, some of the decision rules and scores have discussion sections that help users better

understand how to decide which rule to use and when to use it appropriately. Download from <u>http://handhelddoc.com/</u>. Free e. Sepsis EGDT (Early Goal Directed Therapy): Developed by an Emergency Medicine resident at UC. This is a program designed for implementation of Early Goal Directed Therapy (EGDT). This program includes information about antibiotics, indications/ contraindications to activated protein C (Xigris), steps to complete EGDT, adjunct therapies and walks the clinician through EGDT. Download from <u>http://handhelddoc.com/</u>. Free f. UpToDate: Palm version available with standard subscription. Need to have a large memory card, and can be problematic at time. Typically will need to reload every 3–5 months due to it suddenly not working. May have fixed since last used though. Full version of UpToDate without any need for an internet connection is

- nice! Cost: Part of standard subscription.
- 3. Medical Calculators

a. Note: Many of the above cinci programs also have calculators included. Recommend EM Rules.

b. Archimedes: Free medical calculator created by skyscape (<u>http://www.skyscape.com/index/home.aspx</u>). Not as extensive as many programs, but has the essentials. Free

#### C. Pocket PC

1. Drug Resources

a. Epocrates: The gold standard for medications. Complete and auto-updates weekly. Along with medication information, also comes with an interactions program, tables, basic math program, and doc memos. Doc memos often seem to be greatly influenced by pharm companies. <u>http://www.epocrates.com</u>/. Free

2. Clinical Point of Care

a. 5-min Clinical Consultant: Excellent resource that provides a quick, concise overview of disease, treatments, medications, and differential. Not complete enough to be the only place to review a disease, but excellent for point of care use. Available at: <u>http://</u><u>www.skyscape.com/index/home.aspx</u> (\$69.95 1 year subscription) b. UpToDate: PocketPC version available with standard subscription. Need to have a large memory card, and can be problematic at time. Typically will need to reload every 3-5 months due to it suddenly not working. Full version of UpToDate though. Cost: Part of standard subscription.

#### 3. Medical Calculators

a. Archimedes: Free medical calculator created by skyscape (<u>http://www.skyscape.com/index/home.aspx</u>). Not as extensive as mediquations, but has the essentials. Free

b. Archimedes 360: More extensive medical calculator from Skyscape. <u>http://www.skyscape.com/index/home.aspx</u>. \$24.95.

#### D. Web Based

1. Medisync: To be made available by The Christ Hospital to all residents. An excellent resource felt to be easier to use at the point of care than

- 2. UpToDate: A must! Comprehensive resource for most medical conditions. Articles are often extensive and cite the most recent evidence. Has essentially replaced most text books. With practice, can be used as a point of care tool. Cost: \$195.00 1 year, \$390.00 for two years (Resident price)
- 3. eMedicine: Excellent adjunct to other resources. Can obtain information free by searching on google (topic then type emedicine). Will require login if you go directly to website.
- 4. NEJM.com: On line version of New England Journal of Medicine. Excellent journal. Has excellent review articles along with case of the week. Also found on the web page are procedure videos that do an excellent job of going through different procedures in detail.
- 5. Internal Website: TCHUCFM.COM

#### Print

#### A. Pocket Guides

1. Drug Database

a. Tarascon Pocket Pharmacopoeia: Original guide for dosing of medications. Purely for doses and does not attempt do too much more than this. Small and easily fits into front pocket. Cost: \$15

2. Clinical Point of Care Reference

a. Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine (Pocket Notebook Series) (Ring-bound): Excellent pocket reference for inpatient adult medicine. Created by residents at U Mass. Contains multiple algorithms, list, and scoring systems. Excellent resource for interns. Cost: \$45 b. Maxwell Quick Medical Reference: Pretty much as advertised. A quick medical reference for the inpatient wards. Contains dermatomes, some formulas often used, mini-mental status exam, and outlines for notes/H&Ps. Fits easily in front pocket. Cost: \$8 c.The Sanford Guide to Antimicrobial Therapy: The pocket medical reference for infectious disease. A must for everyone. Cost: \$13

B. Text Books

1. CURRENT Medical Diagnosis and Treatment: Excellent book covering much of internal medicine. Far easier to read than Harrison's, yet still complete. Uptodate has replaced it, but still a good resource. Cost: \$65 2. Harrison's Internal Medicine: The medicine textbook. Similar to the current series, has been replaced by UpToDate. Cost: \$150

Basic Doctoring Skills Shaded areas = expectations that should be achieved by the end of the intern year

Objectives: Basic Doctoring Skills	Pati ent Car e	Medi cal Kno wled ge	Pract ice Base d Lear ning	Inter- perso nal Com muni catio n	Prof es- sion alis m	Syst em Base d Prac tice
<u>1. Data gathering skills</u>						

a. Resident is able consistently perform a complete history and physical examination that is appropriate for the	х	x			
b. Resident is able to collect essential and accurate data from the patient	х	х		x	
c. Resident is able to recognize the severity of the patient's condition	х	х			
d. Resident reads and consults information sources for patient care	Х	x	x		
2. Reasoning with the Data					
a. Resident is able to interpret the data	Х	X			
b. Resident recognizes critical	Х	X			
<u>3. Making a Diagnosis</u>					
a. Resident offers an adequate differential diagnosis	х	х			
b. Resident orders appropriate tests to help make the diagnosis	Х	x			
c. Resident can prepare a rationale for the differential diagnosis list	Х	X			
<u>4. Formulating &amp; Monitoring the</u> <u>Treatment Plan</u>					
<ul> <li>a. Resident's management plans are appropriate and complete.</li> <li>i. appropriate admission orders and plans</li> <li>ii. repetitive evaluation, anticipating response to treatment, adjustment of the care plan during the hospitalization.</li> <li>iii. able to consult appropriate specialty physicians/ care givers</li> <li>iii. discharge planning incorporating coordination of</li> </ul>	x	Х			
b. Resident correctly makes medical decisions based on patient data and	Х	X			
2. Desident is able to manage [					
patients/day on the inpatient service	X				X
b. Resident is able to prioritize the work flow and multi-task while	Х				X
6. Approach to Medical Knowledge for					

Resident exhibits and investigatory approach to knowledge deficits -Generates questions, knows where to look up information, can apply the information to the clinical situation,		X	X		X	
Resident is able to analyze patient problems and identifies what		X	X		X	
Resident is able to demonstrate improved proficiency when encountering repeat diagnoses or problems (assimilates and applies new		X	X			
Resident does self-evaluation of clinical encounters and learns from those clinical encounters		X	X		X	
Resident works on areas identified that needs improvement for practicing		X	X		X	
Resident facilitates the learning of others on the inpatient team			X			
Resident monitors personal progress toward independent practice	Х		X			
Resident is able to supervise other learners appropriate to his or her level.	Х		X			X
7. Interpersonal and						
Resident provides clear verbal explanations or presentations to patients, patient families (Family Centered Rounds) or others on the				X		
Resident's written or dictated communication is organized and easy to follow, accurate and complete				Х		
Resident works effectively with others on the health care team				X		
Resident projects positive attitudes toward physician colleagues				X	X	
Resident has no problems with patient complaints due to poor communication				X		
Resident engenders confidence due to effective communication skills and				X		
Resident transitions patients to fellow residents in a safe and efficient manner.						
8 Professionalism: Character and						

<u>8. Professionalism: Character and</u>			
<u>Physician Behaviors</u>			

Resident consistently exhibits the following character traits: promptness, respectful of others, honesty, hard- working, responsible, teachable,			x	
Resident responds to pages promptly			X	
Resident exhibits appropriate physician- patient relationships, maintains			X	
Resident has good hygiene and appropriate levels of dress as a			X	
Resident knows his limitations as a			X	
Resident follows informed consent and patient confidentiality		X	X	
9. Systems Based Practice				
Resident is able to create high quality medical records				Х
Resident keeps discharge summaries				X
Resident considers cost of care in the care of the patient				X
Resident demonstrates patient advocacy				X

Objective	Pati ent Car e	Med ical Kno wled ge	Prac tice Base d Lear ning	Inter – pers onal Com muni catio	Prof es- sion alis m	Syst em Base d Prac tice	Typ e of obje ctiv e
See Hospitalist Document for specific objectives related to skills, attitudes, and knowledge for the common conditions seen in the inpatient setting							

COPD

Knowledge

- Define COPD and describe the basic pathophysiologic processes. Intern Year
- Describe potential precipitants of exacerbation, including infectious and non-infectious etiologies. Intern year
- Recognize and differentiate the clinical presentation of COPD exacerbation from other acute respiratory and nonrespiratory syndromes. Intern year

- Describe the role of diagnostic testing used for evaluation of COPD exacerbations. Intern year
- Describe the evidence based therapies of treatment of COPD exacerbations, which may include bronchodilators, systemic corticosteroids, oxygen, and antibiotics. <u>Second Year Resident</u>
- List the indicators of disease severity. <u>Second Year Resident</u>
- Explain the goals for hospital discharge. <u>Second Year Resident</u>
- Recognize the potential risks of supplemental oxygen therapy, including development of hypercarbia in patients with chronic respiratory acidosis. Intern Year

Patient Care

- Elicit a focused history to identify symptoms consistent with COPD exacerbation and etiologic precipitants. <u>Intern Year</u>
- Perform a targeted physical examination to elicit signs consistent with COPD exacerbation, differentiate it from other mimicking conditions, and assess severity of illness. Intern Year
- Diagnose patients with COPD exacerbation using history, physical examination, and radiographic data. Intern Year
- Select and interpret appropriate diagnostic studies to evaluate severity of COPD exacerbation. <u>Second Year</u>
- Recognize symptoms, signs, and severity of impending respiratory failure. Intern Year
- Prescribe appropriate evidence based pharmacologic therapies during COPD exacerbation, using the most appropriate route, dose, frequency, and duration of treatment. <u>Second Year</u>
- Utilize EBM recommendations for the treatment of patients with COPD exacerbations. <u>Second Year</u>

Interpersonal Communication Skills

- Communicate with patients and families to explain the natural history and prognosis of COPD. <u>Second Year</u>
- Communicate with patients and families to explain the goals of care plan, including clinical stability criteria, the importance of prevention measures such as smoking cessation, and required follow-up care. Intern Year
- Communicate with patients and families to explain discharge medications, potential side effects, duration of therapy, and dosing, and taper schedule. Intern Year
- Ensure that prior to discharge patients receive training on proper inhaler techniques and use. Intern Year
- Dialogue with patients and families regarding care goals and limitations, including palliative care and end-of-life wishes. Second Year
- Document treatment plan and discharge instructions, and communicate with the outpatient clinician responsible for follow-up. Intern Year

Professionalism

• Recognize indications for specialty consultation. <u>Third Year</u> System Based Practice

- Lead, coordinate or participate in multidisciplinary initiatives, which may include collaboration with pulmonologist, to promote patient safety and cost-effective diagnostic and management strategies in the care of patients with COPD. <u>Third Year</u>
- Employ a multidisciplinary approach, which may include pulmonary medicine, respiratory therapy, nursing and social services, to the care of patients with COPD exacerbation, beginning at admission and continuing through all care transitions. <u>Third Year</u>
- Collaborate with PCP and ED physicians in making the admission decisions. <u>Third Year</u>

# Acute Decompensated Heart Failure

Knowledge

- Explain the underlying causes of CHF. Intern Year
- Explain the precipitating factors leading to an exacerbation. Intern Year
- Define and differentiate systolic and diastolic dysfunction, and explain the etiologies of each. <u>Intern Year</u>
- Describe the indicated tests required to evaluate CHF, including evaluation for new onset CHF. <u>Second Year</u>
- Describe goals of inpatient therapy for acute decompensated heart failure including pre-load and after-load reduction, hemodynamic stabilization, and optimization of volume status. <u>Second Year</u>
- Explain EBM therapeutic options for management of acute and chronic CHF and describe contraindications to these therapies. Third Year
- Explain indications, contraindications, and mechanisms of action of pharmacologic agents used to treat CHF. <u>Second Year</u>
- Explain markers of severity and factors that influence prognosis. <u>Second Year</u>
- Explain goals for hospital discharge, including specific measures of clinical stability for safe care transition. <u>Second Year</u>

#### Patient Care

- Elicit a thorough and relevant history and review the medical record to identify symptoms, co-morbidities, medications, and/or social influences contributing to CHF and its exacerbation. <u>Second Year</u>
- Recognize the clinical presentation of heart failure, including features of exacerbation and reliability of signs and symptoms. Intern Year
- Recognize symptoms and signs of acute decompensation. Intern Year
- Identify physical findings consistent with CHF. Intern Year
- Identify signs of low perfusion states and cardiogenic shock. Intern Year

- Risk stratify patients admitted with CHF and determine the appropriate level of care. <u>Second Year</u>
- Order indicated diagnostic testing to identify precipitating factors of CHF and assess cardiac function. <u>Second Year</u>
- Formulate an EBM treatment plan, tailored to the individual patient, which may include pharmacologic agents and dosing, nutritional recommendations, and patient compliance. <u>Second</u> <u>Year</u>
- Assess patients with suspected heart failure in a timely manner, identify the level of care required, and manage appropriately. <u>Third Year</u>

Interpersonal Communication Skills

- Communicate with patients and families to explain the history and prognosis of CHF. <u>Second Year</u>
- Communicate with patients and families to explain the importance of home self-monitoring and adherence to medication regimens and nutritional recommendations. Intern Year
- Communicate with patients and families to explain goals of care plan, discharge instructions, and management after release from hospital. Intern Year

# Professionalism

- Recognize indications for early cardiology consultation. <u>Second</u> <u>Year</u>
- Responsibly address end of life care wishes for patients with endstage CHF. Intern Year

# System Based Practice

- Utilize the built in CHF systems at The Christ Hospital, including CHF Nurse Practitioner, nutrition, and educational resources provided by nursing and social work services. Second Year
- Document treatment plan and provide clear discharge instructions for receiving primary care physicians. <u>Intern Year.</u>
- Recognize the importance of palliative care in the treatment of patients with severe CHF. <u>Second Year</u>

# Skin and Soft Tissue Infections

Knowledge

- Describe the clinical presentation of cellulitis and compare routine and complicated cellulitis. <u>Intern Year</u>
- Differentiate cellulitis from chronic venous stasis and other conditions that may mimic cellulitis. <u>Second Year</u>
- Describe the indicated tests required to evaluate cellulitis. Intern Year
- Relate etiology, including pathogen, of cellulitis with certain host factors and exposures. <u>Second Year</u>
- Describe empiric antibiotic selection for an individual patient depending upon probable etiology. Intern Year
- Explain indications for inpatient admission.
- Explain goals for hospital discharge, including specific measures of clinical stability for safe care transition. <u>Third Year</u>

Patient Care

- Elicit a focused history to identify precipitating causes of cellulitis and co-morbid conditions that may impact clinical management. Intern Year
- Accurately identify and document cellulitis borders and signs of complications, which may include crepitus and abscess. <u>Intern</u> <u>Year</u>
- Determine and interpret an appropriate and cost-effective initial diagnostic evaluation of cellulitis including laboratory and radiological studies. <u>Intern Year</u>
- Initiate empiric antibiotic treatment of cellulitis based on host exposures, predisposing underlying systemic illness, history and physical examination, presumptive bacterial pathogens, and evidence based recommendations. <u>Second Year</u>
- Treat co-existing fungal infection, edema, and other conditions that may exacerbate cellulitis. <u>Second Year</u>
- Formulate a subsequent treatment plan that includes narrowing antibiotic therapies based on available culture data and patient response to treatment. <u>Second Year</u>
- Determine appropriate timing for transition from IV to PO therapy. <u>Third Year.</u>

Interpersonal Communication Skills

- Communicate with patients and families to explain the history and prognosis of cellulitis. Intern Year
- Communicate with patients and families to explain goals of care plan, discharge instrctions, and management after release from hospital. <u>Second Year</u>
- Communicate to outpatient providers the notable events of the hospitalization and anticipated post-discharge needs. <u>Second</u> <u>Year</u>

# Professionalism

- Recognize the need for early specialty consultation in cases with complications, misdiagnosis, or lack of response to therapy. <u>Third Year</u>
- System Based Practice
- Employ a multidisciplinary approach to the care of patients with cellulitis that begins at admission and continues through discharge. <u>Second Year</u>
- Communicate to outpatient providers the notable events of the hospitalization and anticipated post-discharge needs. <u>Second</u> <u>Year</u>
- Consider cost effectiveness and ease of conversion to outpatient treatment when choosing among therapeutic options. <u>Second</u> <u>Year</u>

# Acute Coronary Syndrome

Knowledge

 Define and differentiate Stable Angina, Unstable Angina, NSTEMI, and STEMI. <u>Intern Year</u>

- Differentiate ACS troponin elevation from Non-ACS troponin leak. Intern Year
- Distinguish ACS from other cardiac and non-cardiac conditions that may mimic ACS. <u>Intern Year</u>
- Describe how cardiac biomarkers are used in the diagnosis of ACS, including timing of testing, and the effects of co-morbidities such as renal disease. Intern Year
- Describe the types of noninvasive cardiac tests, including the indications for the different stress methods and the strengths and weaknesses for each type. <u>Second Year</u>
- Explain indications for and risks associated with cardiac catheterization. <u>Second Year</u>
- List the major and minor risk factors predisposing patients to coronary artery disease. <u>Intern Year</u>
- Explain indications for hospitalization of patients with chest pain. Intern Year
- Explain indications, contraindications, and mechanisms of action of pharmacologic agents used to treat ACS. Intern Year
- Explain the value and use of validated risk stratification tools (ie TIMI Risk Score). Intern Year
- Describe factors that indicate the need for early invasive interventions. <u>Second Year</u>
- Describe how ACS presentation can vary in female patients, specifically identifying atypical symptoms. Intern Year

Patient Care

- Elicit a thorough and relevant history with emphasis on presenting symptoms and patient risk factors for coronary artery disease. Intern Year
- Conduct a physical examination with emphasis on the cardiovascular and pulmonary systems, and recognize clinical signs of ACS and disease severity. <u>Intern Year</u>
- Diagnose ACS through interpretation of expedited testing including history, physical examination, EKG, chest x-ray, and biomarkers. Intern Year
- Perform early risk stratification using validated risk stratification tool (TIMI Risk Score). <u>Intern Year</u>
- Synthesize results of history, physical examination, EKG, laboratory and imaging studies, and risk stratification tools to determine therapeutic options, formulate and EBM treatment plan, and determine level of care required. <u>Second Year</u>
- Assess patients with suspected ACS in a timely manner, identify the level of care required, and manage the patient appropriately. <u>Second Year</u>
- Initiate secondary prevention measures prior to discharge, including smoking cessation, dietary modification, and EBM therapies. Intern Year.

Interpersonal Communication Skills

• Communicate with patients and families to explain the history and prognosis of their cardiac disease. <u>Intern Year</u>

- Communicate with patients and families to explain goals of care plan, discharge instructions, and management after release from hospital. <u>Second Year</u>
- Communicate with patients and families to explain tests, procedures, and the use and potential side effects of pharmacologic agents. <u>Second Year</u>
- Communicate to outpatient providers the notable events of the hospitalization and post-discharge needs, including outpatient cardiac rehabilitation. <u>Intern Year</u>

Professionalism

• Recognize indications for early specialty consultation. <u>Intern Year</u> System Based Practice

• Employ a multidisciplinary approach including nursing, nutrition, rehabilitation, and social services in the care of patients with ACS that begins at admission and continues through all care transitions. Intern Year

# Acute Renal Failure

Knowledge

- Define and differentiate pre-renal failure, intrinsic renal disease, and post-renal failure. Intern Year
- Describe the symptoms and signs of pre-renal failure, intrinsic renal disease, and post-renal failure. <u>Intern Year</u>
- Describe the laboratory studies that are utilized to differentiate pre-renal failure from acute tubular necrosis, and describe how diuretics may effect studies. <u>Second Year</u>
- Distinguish the causes of pre-renal failure, intrinsic renal failure, and post-renal failure. Intern Year
- Identify common electrolyte abnormalities that occur with acute renal failure and the corrective therapy. <u>Second Year</u>
- Describe the indicated tests required to evaluate ARF, with special attention to those test required to differentiate the three major categories. Intern Year
- Calculate the risk for contrast induced nephropathy utilizing scoring system and describe the methods for prevention of CIN. Second Year
- Describe the indications for acute hemodialysis. Intern Year
- Identify clinical, laboratory, and imaging studies that indicate severity of disease. Intern Year
- Explain the renal and systemic effects of IV contrast agents including IV dye and gadolinium. <u>Second Year</u>
- Explain goals for hospital discharge, including specific measures of clinical stability for safe care transition. <u>Second Year</u>

Patient Care

• Elicit a thorough and relevant history and review the medical record for factors predisposing or contributing to the development of ARF. Intern Year

- Review all drug use including prescription and over-the-counter medications, herbal remedies, nutritional supplements, and elicit drugs. Intern Year
- Perform a physical examination to assess volume status and to identify underlying co-morbid states that may result in ARF. Second Year
- Order and interpret indicated diagnostic studies that may include urinalysis and microscopic sediment analysis, urinary diagnostic indices, urinary protein excretion, serologic evaluation, and renal imaging. <u>Third Year</u>
- Identify patients who may benefit from early hemodialysis. <u>Second Year</u>
- Formulate a treatment plan tailored to the individual patient, which may include fluid management, pharmacologic agents and dosing, nutritional recommendations, and patient compliance. <u>Second Year</u>
- Identify and treat factors that may complicate the management of ARF, including extremes of blood pressure and underlying infections. <u>Second year</u>
- Adjust medications according to estimated renal function and route of excretion. <u>Second Year</u>
- Avoid use of nephrotoxic agents in ARF. Intern Year
- Assess patients with suspected ARF in a timely manner, and initiate management. <u>Second Year</u>

Interpersonal Communication Skills

- Communicate with patients and families to explain the history and prognosis of ARF. <u>Second Year</u>
- Communicate with patients and families to explain goals of care plan, discharge instructions, and management after release from hospital. <u>Second Year</u>
- Communicate with patients and families to explain tests and procedure and their indications and potential side effects. <u>Second</u> <u>Year</u>
- Document treatment plan and provide clear discharge instructions for post-discharge physicians. Intern Year

Professionalism

• Recognize indications for early specialty consultation. Intern Year

System Based Practice

- Employ a multidisciplinary approach, which may include nursing, nutrition and pharmacy services in the care of patients with ARF. <u>Third Year</u>
- Advocate for established and supportive initiatives that have been shown to reduce incidence of iatrogenic ARF. <u>Third Year</u>

# Preoperative Cardiac Evaluation

Knowledge

• Explain the goals and components of preoperative risk assessment. <u>Second Year</u>

# Knowledge

- Describe the ischemic and hemorrhagic causes of stroke. <u>Intern</u> <u>Year</u>
- Describe the relationship between the anatomy of stroke and clinical presentation. Intern Year
- List risk factors for ischemic and hemorrhagic stroke. Intern Year
- Explain indications, contraindications, and mechanisms of action of pharmacologic agents used to treat and prevent strokes. Intern Year
- Explain the optimal blood pressure control for individual patients presenting with acute stroke (ischemic and hemorrhagic). <u>Second</u> <u>Year</u>
- Describe the imaging and laboratory studies to evaluate a new stroke, including those studies to evaluate for the etiology of a stroke. Intern Year
- Define and differentiate a TIA from a true CVA. Intern Year
- Explain the criteria for hospital discharge for a TIA and CVA. Intern Year

Patient Care

- Elicit pertinent details of clinical history and symptoms that are typical of stroke or TIA. <u>Intern Year</u>
- Perform a directed physical examination with emphasis on through neurological examination to help guide further evaluation and treatment. Intern Year
- Diagnose the etiology of stroke thorugh interpretation of initial testing including history, physical examination, EKG, neurological imaging, and laboratory results. <u>Intern Year</u>
- Initiate indicated acute therapies and monitoring to improve the prognosis of stroke and TIA. <u>Intern Year</u>
- Identify patients at risk for aspiration and address nutritional issues. Intern Year
- Initiate appropriate prophylactic measures for the common complications of stroke. Intern Year
- Assess patients with an acute CVA in a timely manner, gather required information, and initiate appropriate treatment. Intern Year

Interpersonal Communication

- Communicate with patients and families to explain the history and prognosis of stroke or TIA. <u>Second Year</u>
- Communicate with patients and families to explain goals of care plan, discharge instructions, and management after release from the hospital. <u>Second Year</u>
- Communicate with patients and families to explain the tests and procedures and their indications. <u>Intern year</u>
- Address resuscitation status early during hospital stay. <u>Intern</u> <u>Year</u>

CVA

Professionalism

- Recognize the indications for early specialty consultations, including neurology, vascular surgery, and stroke team. <u>Second</u> <u>Year</u>
- System Based Practice
  - Implement prophylaxis against common complications, using a multidisciplinary approach, including preventing UTI, pressure sores, pneumonia, and VTE. <u>Second Year</u>
  - Recognize barriers to follow-up care of stroke patients and involve a multidisciplinary hospital staff to accordingly tailor medications and transitions of care plans. <u>Third Year</u>
  - Communicate to outpatient providers the notable events of the hospitalization and post-discharge needs. Intern Year

### Delirium

Knowledge

- Define delirium and dementia. Intern Year
- List the causes of delirium. Intern Year
- Describe the indicated test required to evaluate delirium. <u>Intern</u> <u>Year</u>
- Describe the methods for prevention of delirium. Intern Year
- Recognize innate and environmental/iatrogenic risk factors for the development of delirium in the hospitalized patient. <u>Intern</u> <u>Year</u>
- Identify medications known to precipitate delirium. Intern Year
- Explain indications, contraindications, and mechanisms of action of pharmacologic agents used to treat delirium and dementia. <u>Second Year</u>
- Describe the poor outcomes related to delirium in the hospitalized patient. Intern Year

#### Patient Care

- Distinguish delirium from other causes of cognition impairment, confusion, or psychosis. <u>Second Year</u>
- Predict a patient's risk for development of delirium based on initial history and physical. Intern Year.
- Implement care plan shown to reduce delirium in the hospitalized patient. Intern year
- Perform a focused evaluation for the underlying etiology of delirium and institute prompt treatment to lessen the severity of delirium. <u>Second Year</u>
- Prescribe appropriate medications and dosing regimens for patients with delirium or at risk for delirium. <u>Second Year</u>
- Assess patients with suspected delirium in a timely manner and identify the level of care required. Intern Year

Interpersonal Communication

• Communicate with patients and families to explain the history and prognosis of delirium. <u>Second Year</u>

- Communicate with patients and families to explain goals of care, discharge criteria, and management following discharge. <u>Third</u> <u>year</u>
- Communicate with patients and families risk factors for delirium and methods to prevent delirium. <u>Second Year</u>

Professionalism

• Recognize indications for specialty consultations. <u>Second Year</u> System Based Practice

- Lead multidisciplinary team to prevent and treat delirium utilizing non-pharmacologic methods. <u>Third Year</u>
- Facilitate discharge planning early in the hospitalization, including communicating with the primary care provider, and providing the patient and family with contact information for follow-up, support, and rehabilitation. <u>Third Year</u>

# Pneumonia

Knowledge

- Define and differentiate CAP, HCAP, and HAP. Intern Year
- List risk factors for Drug Resistant Strep pneumonia (DRSP) and antibiotic treatment for DRSP. Intern Year
- Recognize the risk factors for multi-drug resistant organisms (MDR) and appropriate empiric antibiotic coverage for MDR organisms. <u>Second Year</u>
- Describe the indicated tests required to evaluate and treat pneumonia. Intern Year
- Predict risk for morbidity and mortality from CAP using an EBM tools such as PORT score or CURB-65 score. <u>Intern Year</u>

Patient Care

- Elicit a focused history to identify symptoms consistent with pneumonia. Intern Year
- Perform a targeted physical examination to elicit signs consistent with pneumonia and differentiate it from other mimicking conditions. Intern Year
- Select and interpret indicated laboratory, microbiologic, and radiological studies to confirm the diagnosis of pneumonia and risk stratify patients. Intern Year
- Apply EBM tools to triage decisions and identify factors that support the need for inpatient treatment or ICU admission. Intern Year
- Initiate empiric antibiotic selection based on risk factors that follow the national guidelines. <u>Second Year</u>
- Recognize and address complications of pneumonia and/or inadequate response to therapy. <u>Second Year</u>

Interpersonal Communications

- Communicate with patients and families to explain the history and prognosis of pneumonia. <u>Intern Year</u>
- Communicate with patients and families to explain the goals of care plan, including clinical stability criteria, the importance of

prevention measures such as smoking cessation and required follow up. <u>Second Year</u>

- Communicate with patients and families to explain tests and procedures, and the use and potential side effects of pharmacologic agents. <u>Second Year</u>
- Document treatment plan and discharge instructions, and identify the outpatient clinician responsible for follow up of pending tests. Intern Year

Professionalism

• Recognize the indications for specialty consultation. <u>Second Year</u> System Based Practice

• Collaborate with primary care and emergency physicians in making the admission decisions based upon evidence based scoring systems. Intern Year

Stress Testing

Knowledge

- Explain how to estimate a patient's pretest probability prior to stress testing and how this estimation differs for female patients. Intern Year
- Recognize when to order exercise vs pharmacologic stress testing. Intern Year
- Recognize when to order imaging with a stress test. Intern Year
- Recognize the additional benefits of exercise testing. Intern Year
- List relative and absolute contraindications to stress testing. Intern Year
- Describe special imaging considerations needed for female population. Intern Year
- Explain the limitations of stress testing in the female population including how sensitivity and specificity are altered and why. Intern Year

# Patient Care

- Elicit a thorough and relevant history with emphasis on presenting symptom and risk factors for CAD to determine a patient's pretest probability. Intern Year
- Integrate history, physical exam findings, EKG and lab results to differential between chest pain rule out and ACS. Intern Year
- Recognize what constitutes an adequate exercise stress test. Intern Year
- Identify patients who might benefit from cardiology consult due to abnormal test results or high pretest probability. <u>Second Year</u>
- Interpersonal Communication Skills
  - Communicate with patient and family about the purpose of stress testing and the role of risk stratification in their care. <u>Second</u> <u>Year</u>
  - Communicate with patient and family discharge expectations and follow up plans. Intern Year
  - Explain to patient and family possible risk factors that could contribute to development of CAD. Intern Year

# Professionalism

• Recognize the indication for early cardiology consultation. <u>Intern</u> <u>Year</u>

System-Based Practice

• Communicate with primary care physicians regarding patient's discharge needs and follow up recommendations. Intern Year

# Venous Thromboembolism (VTE)

Knowledge

- Describe pathophysiologic conditions of Virchow's Triad that contribute to development of thrombus. <u>Intern Year</u>
- Recognize specific risk factors for development of VTE. Intern
   Year
- Describe the clinical presentation of PE and DVT. Intern Year
- Differentiate the clinical picture of PE from other respiratory and cardiac syndromes, including but not limited to CHF and pneumonia. Intern Year
- Differentiate DVT from other pathologies such as cellulitis and superficial thrombophlebitis. <u>Intern Year</u>
- Recognize the limitations of a PERC score and what clinical settings it can/should be used. Intern Year
- Explain the value and use of risk stratification tools (i.e. Well's score). Intern Year
- Describe available testing methods for diagnosis of PE or DVT including d-dimer, CT-PA, V/Q scan, and venous doppler ultrasound. Intern Year
- Explain the difference between prophylactic and treatment dosing UFH and LMWH. Intern Year
- Recognize contraindications to prescribing LMWH. Intern Year

Patient Care

- Elicit a thorough and relevant history including pertinent risk factors for the development of VTE. Intern Year
- Conduct a physical exam that focuses on cardiovascular system, pulmonary system and extremities. Intern Year
- Recognize clinical signs and laboratory data, EKG findings, and imaging results that suggest severe disease. <u>Second Year</u>
- Employ the PERC score in the appropriate clinical setting. <u>Intern</u> <u>Year</u>
- Utilize the Well's scoring system in the correct clinical setting to determine pretest probability. Intern Year
- Effectively utilize PE algorithm for appropriate work up, based upon patient's pretest probability. Intern Year
- Recognize which patients require empiric treatment with heparin. Intern Year
- Prescribe appropriate weight-based dose of LMWH when indicated. Intern Year

Interpersonal Communication Skills

• Communicate with patient and family expected clinical course and duration of treatment. Intern Year

- Communicate with patient and family to explain tests and their results as well as potential side effects of therapeutic options. <u>Second Year</u>
- Communicate with patient and family discharge instructions and necessary follow up plans. Intern Year

Professionalism

• Recognize need for early specialty consultation. <u>Intern Year</u> System-Based Practice

- Employ a multidisciplinary approach including nursing, nutrition and social services in the care of patients with VTE. <u>Second Year</u>
- Communicate to primary care providers notable events during hospitalization and discharge recommendations and follow up needs. <u>Intern Year</u>

Evidence Based Medicine

Patient Care

- Formulate clinically answerable questions using the PICO format during patient encounters. <u>First Year</u>
- Utilizing online, Point Of Care Tools, identify answers to questions and apply them to the clinical situation. <u>Second Year</u>

Medical Knowledge

- Compare and contrast a background and foreground type question. Intern Year
- $\bullet$  Describe the parts of a clinically answerable question (PICO). Intern  $\underline{Year}$
- List Point of Care Tools used to practice EBM in the clinical setting. Intern Year
- Compare and contrast sensitivity and specificity. Intern Year
- Compare and contrast the strengths and weaknesses for the types of resources (Systems, Synopsis, Systemic Reviews, Primary Sources). Intern Year

• Differentiate systemic reviews from meta-analysis. <u>Second Year</u> Practice Based Learning

• Demonstrates an investigatory approach to patient care. <u>Intern Year</u> Atrial Fibrillation

Knowledge

- Define and differentiate the different presentations of atrial fibrillation including paroxysmal, persistent, permanent, and lone Afib. <u>Intern</u> <u>Year</u>
- Understand and explain the stroke risks associated with the different presentations of atrial fibrillation. Intern Year
- Explain the risks and benefits of rate control methods vs rhythm control methods in atrial fibrillation. <u>Intern Year</u>
- Explain the different pharmacologic options for controlling atrial fibrillation in acute and chronic states. <u>Second Year</u>
- Describe how the CHADS2 score is used to identify patients with indications for long-term anticoagulation with warfarin vs aspirin Intern Year
- Explain the work-up and differential for patients with new-onset atrial fibrillation Intern Year

- Explain and understand the management for patients presenting with atrial fibrillation with a rapid ventricular rate Intern Year
- Identify indications and management for elective cardioversion <u>Second</u> <u>Year</u>
- Identify indications and management for emergent cardioversion Intern Year

Patient Care

- Elicit a thorough and relevant history and review the medical record for factors predisposing or contributing to the development of atrial fibrillation Intern Year
- Perform a directed physical examination with emphasis on the cardiovascular examination to help guide further evaluation and treatment. Intern Year
- Predict a patient's risk of stroke utilizing the CHADS2 scoring system Intern Year
- Select and interpret indicated laboratory, microbiologic, and radiological studies to confirm the diagnosis of atrial fibrillation. Intern Year

Interpersonal Communication

- Communicate with patients and families to explain the history and prognosis of atrial fibrillation. Intern Year
- Communicate with patients and families to explain goals of care plan, discharge instructions, and management after
- release from the hospital. <u>Second Year</u>
  Communicate with patients and families to explain the tests and
- procedures and their indications. <u>Second Year</u>
- Document treatment plan and provide clear discharge instructions for post-discharge physicians. Intern Year

Professionalism

• Recognize the indications for specialty consultation from Cardiology. <u>Second Year</u>

System Based Practice

- Employ a multidisciplinary approach, which may include nursing, nutrition and pharmacy services in the care of patients with atrial fibrillation. <u>Third Year</u>
- Communicate to outpatient providers the notable events of the hospitalization and post-discharge needs. <u>Intern Year</u>

# Syncope

Knowledge

- Explain differences between true syncope, presyncope, vertigo. <u>Intern</u> <u>Year</u>
- Provide a broad differential for the multiple causes of syncope. <u>Intern</u> <u>Year</u>
- Understand the differences between the common causes of syncope including cardiac, neurologic, autonomic, metabolic. <u>Second Year</u>
- Understand the importance of ruling out cardiac etiology on an inpatient setting. Intern Year
- Understand the mortality risks associated with a cardiac etiology for syncope versus other causes of syncope. Intern Year

- Describe the indicated tests required to evaluate the causes of syncope. <u>Second Year</u>
- Describe the indications for hospitalization for syncope. Second Year
- Understand that a large portion of patients who present with syncope do not have an etiology identified after thorough workup. Intern Year

Patient Care

- Elicit a focused history to identify symptoms consistent with true syncope versus presyncope or vertigo. Intern Year
- Perform a targeted physical examination to elicit signs consistent with syncope and differentiate it from other mimicking conditions. <u>Intern</u> <u>Year</u>
- Select and interpret indicated laboratory and radiological studies to help delineate the cause of syncope. <u>Intern Year</u>

Interpersonal Communication

- Communicate with patients and families to explain the history and prognosis of syncope. <u>Second Year</u>
- Document treatment plan and discharge instructions, and identify the outpatient clinician responsible for follow up of pending tests. <u>Second Year</u>

Professionalism

- Recognize the indications for specialty consultation from Cardiology and/or Neurology. <u>Second Year</u>
- System Based Practice
  - Employ a multidisciplinary approach, which may include nursing, nutrition and pharmacy services in the care of patients with syncope. <u>Third Year</u>
  - Communicate to outpatient providers the notable events of the hospitalization and post-discharge needs. <u>Second Year</u>