

General Medicine (Inpatient) Learning Objectives
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I. General learning objectives:

A. Clinical Objectives (clinical skills)

1. For PGY1:
 - a. Perform a thorough history and physical exam on new admissions
 - b. Formulate a treatment plan with your resident
2. For PGY2/3:
 - a. Effectively manage your team
 - b. Formulated a definitive treatment plan for your patients and anticipate hospital course and discharges
 - c. Incorporate evidence based medicine into your medical management.
 - d. Allocate time for teaching your medical students – define goals and objectives and set aside time for them to present.

B. Interpersonal Objectives (patient, colleague/communication)

1. For All Residents
 - a. Communicate to the PCP that patient was admitted and state any necessary follow up for when patient returns to PCP (inc IMA pts)
 - b. Finish discharge summaries in timely fashion for when patient follows up (consider printing out or faxing for patients not seen at Sinai)
 - c. If patient told to follow up as walk-in, give patient written instructions to bring to IMA or PCP to inform provider of reason of follow up.
 - d. Communicate clearly to patients about their diagnosis, their medications and their plan for discharge
2. For PGY1:
 - a. Give concise and informative sign out
 - b. Call consultants and communicate clearly the reason/question for the consult.
3. For PGY2/3:
 - a. Incorporate teaching into rounds
 - b. Teach a topic relevant to your patient care during bagel rounds
 - c. Communicate clearly and effectively with consultants, supervisors and other colleagues

C. Procedural Objectives

1. Perform ABGs
2. Perform venous blood draws
3. Place emergent central lines

Interns should know all below topics

II. Medical Knowledge Objectives

A. Pneumonia

1. Differentiate between community-acquired pneumonia and hospital-acquired pneumonia
 - a. Be able to initiate empiric treatment for either type
2. Differentiate aspiration pneumonia from aspiration pneumonitis
3. Identify and treat ventilator-acquired pneumonia
4. Identify the pertinent organisms associated with community-acquired pneumonia, hospital acquired pneumonia, aspiration pneumonia and ventilator associated pneumonia
5. Address the utility of sputum samples in the diagnosis of pneumonia
6. Apply prognostic/triage prediction rules (i.e. PORT score/CURB 65) to your patient
7. Identify pneumonia on a chest x-ray
8. Readings:
 - a. Halm EA, Teirstein AS. Management of Community-Acquired Pneumonia. N Engl J Med 347:2039. PMID: 12490686
 - b. Marik PE. Aspiration Pneumonitis and Aspiration Pneumonia. N Engl J Med 344:665. PMID: 11228282
 - c. Muscedere, J. et al. Comprehensive evidence-based clinical practice guidelines for ventilator-associated pneumonia: Diagnosis and treatment. Journal of Critical Care: Volume 23(1)March 2008p 138-147 PMID: 18359431

B. Pulmonary Embolism

1. Recognize typical physical exam findings associated with pulmonary embolism
2. Apply pretest probability criteria, including the Well's criteria
3. Identify the appropriate work-up tests for suspected pulmonary embolism associated with specific pretest probabilities
4. Understand the utility of d-dimer
5. Initiate treatment for PE
6. Identify treatment lengths for first pulmonary embolism and recurrent embolism
7. Recognize situations in which thrombolysis is necessary
8. Identify what tests to order as part of a hypercoagulable work up, know how to individualize that work up for your patient, and when to order the labs in relation to anticoagulation therapy
9. Be familiar with the role of IVC filters in prevention of PE and their associated complications/effect on mortality
10. Have a basic understanding of coumadin resistance and its clinical relevance in PE
11. Readings:
 - a. Tapson VF. Acute Pulmonary Embolism. N Engl J Med 358:1037. PMID: 18322285
 - b. Bates SM, Ginsberg JS. Treatment of Deep-Vein Thrombosis. N Engl J Med 351:268. PMID: 15254285
 - c. Decousus, H, Leizorovicz, A, Parent, F, et al. A clinical trial of vena caval filters in the prevention of pulmonary embolism in patients with proximal deep-vein thrombosis. N Engl J Med 1998; 338:409. PMID: 9459643

- d. Eight-year follow-up of patients with permanent vena cava filters in the prevention of pulmonary embolism: the PREPIC (Prevention du Risque d'Embolie Pulmonaire par Interruption Cave) randomized study. *Circulation* 2005 Jul 19;112(3):416-22. Epub 2005 Jul 11. PMID: 16009794

C. COPD

1. Interpret PFT findings associated with COPD
2. Recognize clinical signs/symptoms of a COPD exacerbation
3. Understand how to initiate and escalate out-patient medical management of COPD
4. Interpret arterial blood gas findings consistent with COPD exacerbations
5. Initiate appropriate medical treatment for COPD exacerbations
6. Know the indications for oral versus intravenous steroids for COPD exacerbations
7. Know when to initiate antibiotics in exacerbation treatment
8. Understand the role magnesium in treating a COPD exacerbation
9. Understand the roles of smoking cessation and supplemental oxygen in COPD treatment
10. Readings:
 - a. Barnes PJ. Chronic Obstructive Pulmonary Disease. *N Engl J Med* 343:269, July 27, 2000. PMID: 10911010
 - b. Stoller JK. Acute exacerbations of Chronic Obstructive Pulmonary Disease. *N Engl J Med* 346:988, March 28, 2002, PMID: 11919309
 - c. Sethi S, Murphy TF. Infection in the pathogenesis and course of COPD. *N Engl J Med* 359:2355, November 27, 2008. PMID: 19038881
 - d. Sutherland ER, Cherniack RM. Management of COPD. *N Engl J Med* 350:2689, June 24, 2004 PMID: 15215485

D. Asthma

1. Interpret and recognize PFT findings associated with asthma
2. Understand how to initiate and escalate outpatient medical management of asthma
3. Identify common triggers associated with exacerbations
4. Interpret arterial blood gas findings consistent with asthma exacerbations
5. Initiate appropriate medical treatment for asthma exacerbations
6. Understand the role magnesium in treating an asthma exacerbation
7. Understand mortality risk associated with long-acting beta agonists alone
8. Identify newer treatment options including the utility of anti-IgE therapies
9. Recognize the utility of singulair
10. Recognize utility of xolair.
11. Reading:
 - a. Fanta CH. Asthma. *N Engl J Med* 2009;360:1002-14. PMID: 19264689
 - b. Strunk RC, Bloomberg GR. [Omalizumab for asthma](#). *N Engl J Med*. 2006 Jun 22;354(25):2689-95. PMID: 16790701

E. Pain management

1. Understand how to initiate and escalate pain medication
2. Be familiar with appropriate use of PCAs

3. Understand how to calculate conversions between classes and types of pain medications
4. Be familiar with common side effects of meds, including constipation and addition
5. Understand supplemental pain medications, specifically:
 - a. bisphosphonates for bone pain in malignancy
 - b. neuropathic pain treatment - diabetic, post-herpetic neuropathy
6. Reading
 - a. Li JM. Pain management in the hospitalized patient. Med Clin North Am. 2002 Jul;86(4):771-95 PMID: 12365340
<http://eresources.library.mssm.edu:2125/das/article/body/160700381-2/jorg=journal&source=&sp=12536832&sid=0/N/298496/1.html?issn=0025-7125>
 - b. Schneider C, Yale SH, Larson M. Clin Med Res. 2003 Oct;1(4):337-40. Principles of pain management.
<http://www.clinmedres.org/cgi/content/full/1/4/337>
 - c. Jackson KC 2nd. Pharmacotherapy for neuropathic pain. Pain Pract. 2006 Mar;6(1):27-33. PMID: 17309706
<http://eresources.library.mssm.edu:2097/cgi-bin/fulltext/118591717/HTMLSTART>

F. DVT prophylaxis

1. Differentiate when to use subcutaneous heparin versus lovenox
2. Differentiate when to use which dosing schedule for subcutaneous heparin [in different age groups]-q8 hours versus q12 hours
3. Identify when to use of venodynes and understand their effectiveness
4. References
 - a. Francis CW. Prophylaxis for Thromboembolism in Hospitalized Medical Patients. N Engl J Med 2007;356:1438-44. PMID: 17409325

G. EtOH withdrawal

1. Be familiar with the SIWA protocol and its utility
2. Understand basic management of withdrawal and seizure prophylaxis
3. Have an understanding of the evidence of symptom-induced versus standing/tapering doses of benzodiazepines
4. References
 - a. Daepfen JB, Gache P, Landry U, Sekera E, Schweizer V, Gloor S, Yersin B. [Symptom-triggered vs fixed-schedule doses of benzodiazepine for alcohol withdrawal: a randomized treatment trial.](#) Arch Intern Med. 2002 May 27;162(10):1117-21. PMID: 12020181