

GENERAL MEDICINE INPATIENT ROTATIONS 2008 – 2009

Overview

The inpatient General Internal Medicine rotations at LSUHSC and the VA Medical Center provide residents experience with patients of varying ages, ethnic and cultural backgrounds, and socioeconomic status who present with a wide diversity of diseases. Admissions to these services are arranged from the Internal Medicine Clinics or Emergency Department, or transferred from outside institutions or one of our subspecialty wards. The schedule of activities and resident responsibilities are described in detail in the Department of Medicine *Resident Handbook*. Learning on this service is patient-centered and requires extensive reading and independent study on the diseases encountered. The outlined educational goals listed below should be achieved by completion of the training program.

Educational Goals

The emphasis of residents and faculty should be on the achievement of the goals listed under each of the six general competencies, applied specifically to the care of patients with the following diseases and problems. (These include, but are not limited to, the most common Diagnostic-Related Group [DRG] diagnoses on the General Medicine inpatient service of the University Hospital.) For each disease process, the emphasis should be on the:

- Pathophysiology
- Cost-effective diagnostic evaluation, including appropriate history and examination, laboratory studies, radiologic studies, other imaging studies, and provocative testing
- Therapy, including fluids and electrolytes, pharmacologic agents, radiation, invasive therapy, and physical therapy
- Follow-up of therapy
- Indications for consultations
- Dealing with patients and their families on the psychosocial aspects of the disease
- Modification of risk factors for the condition
- Preventing complications of the condition

1. Congestive heart failure
2. Anemia
3. Sickle cell disease with pain crisis
4. Chest pain and coronary artery disease
5. Stroke and cerebrovascular disease
6. Pancreatitis
7. Uncontrolled diabetes, including diabetic ketoacidosis

8. Pneumonia
9. Chronic obstructive pulmonary disease and asthma
10. Gastrointestinal hemorrhage
11. Hypovolemia, electrolyte disorders, and acid-base disturbances
12. Deep vein thrombosis and pulmonary embolism
13. Urinary tract infection
14. Cellulitis
15. Uncontrolled hypertension
16. Acute and chronic renal failure
17. Poisonings and adverse drug reactions
18. Lung cancer
19. Cardiac arrhythmias
20. HIV disease and associated conditions
21. Sepsis and bacteremia
22. Infective endocarditis
23. Alcohol withdrawal syndrome
24. Seizure disorders
25. Central nervous system infections
26. Acute inflammatory arthritis

The educational goals for each competency are listed by resident level. This division is somewhat arbitrary. PGY-1 residents should begin to develop the goals listed for upper level residents, and will have many opportunities to practice these skills. Upper level residents are expected to continue to practice and refine the skills listed for PGY-1 residents, and their competency in these areas will continue to be evaluated.

The goals listed for all the competencies apply not only to the General Medicine rotations, but also to other rotations that are part of the Internal Medicine residency program. This is particularly true for the skills listed under Interpersonal and communication skills, Practice-based learning, and Professionalism. Competence in these areas may be evaluated at the end of any rotation.

Patient Care – PGY-1

- Interview patients more skillfully
- Examine patients more skillfully
- Demonstrate competence in the immediate care of potentially unstable patients, including but not limited to, those with hypotension, acute pain, respiratory distress, dysrhythmias, fever, hemorrhage, and critical lab values
- Develop rational, evidence-based management strategies for common diseases and problems
- Develop competence in the performance of common procedures
- Understand the cognitive aspect of procedures: indications, contraindications, recognition and management of complications, pain management, sterile techniques, specimen handling, and requirements for informed consent
- Use clinical data to modify management strategies on a daily basis

- Develop skill in ordering pharmacotherapy for the common diseases and problems encountered in the hospital, with attention to drug interactions and potential adverse reactions
- Assume the role of central caregiver under careful supervision of supervising residents and faculty

Patient Care – PGY-2, 3, 4

- Coordinate care with multidisciplinary services, to include discharge planning, education of the patient's family, and/or preparation for rehabilitative care or other long-term care placement
- Refine management plans for common diseases and problems encountered in the hospital
- Refine skill in the performance of common procedures
- Use appropriate consultations to assist in patient diagnosis and management
- Recognize the importance of nutrition in serious illnesses
- Recognize differences in the care of hospitalized geriatric patients
- Appropriately apply ethical principles in patient care

Medical Knowledge – PGY-1

- Develop a knowledge base required to systematically approach the management of patients hospitalized for acute and chronic medical conditions
- Generate a differential diagnosis for common diseases and symptoms encountered in the hospital
- Interpret routine diagnostic studies in hospitalized patients: serum electrolytes and standard chemistry panels; complete blood count and peripheral smear; coagulation studies; urinalysis; spirometry
- Interpret the results of common diagnostic procedures: abdominal paracentesis, thoracentesis, lumbar puncture
- Interpret routine radiographs: chest, abdominal flat plate, bones and joints
- Recognize common electrocardiographic patterns

Medical Knowledge – PGY-2, 3, 4

- Refine the knowledge of diseases requiring hospital management, with emphasis on pathophysiology, and share this knowledge base with interns and medical students
- Understand the pharmacokinetics and pharmacodynamics of drugs commonly used in the management of hospitalized patients
- Refine skill in the interpretation of the results of common diagnostic procedures
- Refine interpretations of electrocardiograms and recognize more complex electrocardiographic patterns

Practice-Based Learning and Improvement – PGY-1

- Identify and acknowledge gaps in personal knowledge and skills in the care of hospitalized patients
- Develop and implement strategies for filling gaps in knowledge and skills

- Develop a willingness and ability to learn from errors and use them to improve the health care system

Practice-Based Learning and Improvement – PGY-2, 3, 4

- Assess and critically evaluate current medical information and scientific evidence relevant to patient care, and use the information technology resources to support patient care decisions
- Use information technology to enhance patient education

Interpersonal and Communication Skills – PGY-1

- Communicate effectively with patients and families
- Communicate effectively with all non-physician members of the health care team to assure comprehensive and timely care of hospitalized patients
- Communicate effectively with physician colleagues at all levels
- Present patient information concisely and clearly, verbally and in writing
- Use appropriate format and content for admission notes, daily progress notes, and discharge summaries
- Recognize the added value of direct communication with other health care professionals (nurses, physical therapists, dieticians, etc.) when specific information and recommendations are desired

Interpersonal and Communication Skills – PGY-2, 3, 4

- Supervise and educate PGY-1 residents and medical students in the delivery of high quality medical care
- Demonstrate effective negotiation and mediation skills with:
 - Narcotic-seeking patients
 - Angry/frustrated patients and/or their families
 - Family members in disagreement on appropriate care of a loved one including disagreements about end-of-life care
- Demonstrate compassionate, patient-centered interviewing techniques in:
 - Patients with chronic and recurrent illnesses, including chronic pain
 - Elderly patients
 - Patients who are angry/frustrated
 - Patients who are poorly educated
 - Patients from differing cultural backgrounds
- Describe and apply appropriate indications for “comfort care” status as well as “do-not-resuscitate” code status

Professionalism – PGY-1

- Behave professionally toward patients, families, colleagues, and all members of the health care team
- Establish a pattern of meeting expectations of other members of the patient care team, including punctuality and cross-coverage
- Learn to evaluate personal attitudes and avoid judgmental behavior in patients with:
 - Acute and chronic pain syndromes

Alcohol and drug abuse-related problems
Problems related to non-adherence to medications and treatment plans
Diseases related to alternative lifestyles

Professionalism – PGY-2, 3, 4

- Provide meaningful feedback to colleagues regarding their performance
- Demonstrate appropriate attitudes toward consultants and colleagues on other hospital services when there is disagreement about patient care

Systems-Based Practice – PGY-1

- Understand and utilize the multidisciplinary resources necessary to care optimally for hospitalized patients
- Collaborate with other members of the health care team to assure comprehensive patient care
- Complete discharge dictations in a timely manner
- Recognize the importance and added value of contact with the patient's primary care physician upon admission to the hospital and at discharge

Systems-Based Practice – PGY- 2, 3, 4

- Use evidence-based, cost-conscious strategies in the care of hospitalized patients
- Learn to interact with case managers on a daily basis for effective patient discharge planning
- Understand and apply prevailing regulations related the following resources:
 - Home health care
 - Long-term acute care, rehabilitation, and nursing home care
 - Home oxygen therapy
 - Medication assistance programs
 - Durable medical equipment
 - Substance abuse programs
 - Observation admissions

Learning Resources

- Harrison's *Principles of Internal Medicine*
- Cecil *Textbook of Medicine*
- *Medical Knowledge Self-Assessment Program (MKSAP) – 14*
- *UpToDate* online
- *MD Consult* online
- *PubMed* online
- Key articles from Morning Report literature searches

Learning Venues/ Activities

- Patient encounters at LSUHSC and VAMC: Evaluation and management of patients admitted from Emergency Department and clinics, or transferred from other inpatient service and hospitals (*all competencies*).
- Procedures (*medical knowledge, patient care*): arterial puncture, central venous catheterization, ACLS, lumbar puncture, abdominal paracentesis, thoracentesis, arthrocentesis, pelvic examination
- Morning Report at both LSUHSC and VAMC (*all competencies*)
- Daily work rounds (*patient care, interpersonal and communication skills, practice-based learning and improvement, professionalism, systems-based practice*)
- Daily attending rounds (*all competencies*)
- Core curriculum lectures (*all competencies*)
- Small group discussions (*interpersonal and communication skills, professionalism*)
- Morbidity and Mortality conferences (*patient care, systems-based practice*)
- Independent study (*patient care, medical knowledge*)

Evaluation Methods (See details in Resident Handbook)

- Global faculty evaluation each month (*all competencies*)
- Physician assistant global evaluation (*all competencies*)
- Peer evaluations each month (*all competencies*)
- Medical student evaluation of PGY-2,3,4 residents (*all competencies*)
- Composite nursing evaluation by each nursing unit each month (*Interpersonal and communication skills, professionalism, systems-based practice*)
- Clinical evaluation exercises – average of two per month (*all competencies*)
- Online procedure log (*patient care, interpersonal and communication skills*)
- Annual In-Training Examination and monthly self-assessment examinations