INTERNAL MEDICINE INPATIENT TEACHING SERVICE

Overview

The Internal Medicine inpatient rotation is a hospital-based experience involving the evaluation and care of patients admitted to the OU Internal Medicine Teaching Service. The educational purpose of this rotation is for residents to acquire the knowledge and skills necessary to become competent and effective inpatient clinicians. In addition to direct patient care, this rotation involves a variety of educational experiences including: resident work rounds (the supervising resident performs daily work rounds with the interns and students), morning report (board review and discussion of clinical cases with evidence based approaches to management), attending rounds (the attending facilitates daily management/teaching rounds for the entire team), midday and afternoon conferences (Noon Conference series and GI teaching rounds) and check-out (residents sign out to their colleagues to ensure continuity for their patients). The demonstration of daily study and the use of evidence in clinical decision making is a core value in the training program and is expected at all levels of training.

On the Internal Medicine Inpatient Rotation, patients are admitted to one of five teams, each consisting of two to three interns, a senior (PGY-2/3) resident, and a supervising attending. One to two students may be assigned to each team. Teams rotate among four “call” periods/positions; rollover (four patients), early call (five patients), late call (four patients), and post call (no admissions). Each team will admit a maximum of eight new patients on the late call day. See also document entitled “rules for night float system” outlining rules and expectations.

The patient population is heterogeneous and includes individuals from divergent ethnic and socioeconomic backgrounds with a wide variety of acute and chronic health problems. Most patients will be admitted from the Emergency Department. Other patients will be directly admitted from the OU Internal Medicine Clinic, transferred from other hospitals, or from the SJMC ICU.

While on the wards, there are many ancillary services that are available for assistance with patient care, such as transporters, phlebotomists, ECG, urology, and orthopedic technicians, as well as respiratory and physical therapists. A case manager is assigned to each team to help with social services. A clinical pharmacist is assigned to each team to provide information pertaining to medications and to assist with monitoring of drug therapy. Medical and surgical consultative services are available to assist teams in the provision of specialized care as needed. Internal Medicine faculty members are available 24 hours a day, 7 days a week for assistance in patient care.

PGY-1: Under the supervision of the PGY-2/3 senior resident, interns are responsible for completing a comprehensive history and physical examination on all (assigned) new patients. The PGY-1 will interpret this information along with initial diagnostic data and formulate a working diagnosis with differential, and an appropriate plan for confirming the diagnosis, treating, and monitoring the patient. Subsequent care and monitoring including daily evaluation and documentation of progress is expected of PGY-1 residents for all assigned patients through the time of discharge. PGY-1 residents will prepare a complete yet concise discharge summary and will arrange follow up care for all assigned patients. PGY-1 residents will admit no more
than five new patients in a twenty-four hour period and will be responsible for following a maximum of ten patients. Overnight call will be every five to ten nights. On overnight call, PGY-1 residents will provide coverage for the OU Internal Medicine Teaching Service teams and will admit no more than four new patients under the supervision of the night float (see night float document).

PGY-2/3: Under the supervision of the attending physician, PGY-2/3 residents are responsible for the oversight of interns and medical students assigned to their team. The PGY-2/3 will assess, prioritize, and distribute new patients among the team and will assist junior team members in the evaluation and management of assigned patients. The PGY-2/3 is responsible for knowing all team patients and for assessing and responding to acute changes and complications. Coordination of care, utilizing interdisciplinary services from admission through discharge is the duty of the PGY-2/3 resident. In addition, PGY-2/3 residents are expected to teach and to facilitate the learning of junior team members. The PGY-2/3 resident will admit no more than ten new patients in a twenty-four hour period and will follow a maximum of twenty patients.

Residents may not exceed 30 hours of continuous work, nor may they exceed 80 hours of work per week. Ten hours of duty-free time are required between work periods. Resident teams assign days off to each member to allow for one day in seven that is entirely free from clinical duties and responsibilities. These requirements are clearly delineated and reviewed during the beginning of month orientation with all inpatient teams.

**Goals**

*(All PGY Levels)*

To learn to provide health care to adults in the hospital setting.
To learn to evaluate and manage a broad spectrum of acute and chronic illnesses affecting hospitalized patients.
To become competent and effective inpatient clinicians.
To learn to become competent and effective Internal Medicine Consultants.
To learn to provide preoperative risk assessment in a competent and effective manner.
To learn to provide perioperative care in a competent and effective manner.
To become proficient in the management of both acute and chronic medical illnesses in patients on other services.
To become proficient in common hospital-based procedures.

**Objectives**

Unless specified, objectives should be met at all levels of training.

**Patient Care**

- To learn to interview and examine hospital patients in an effective, efficient, and sensitive manner.
• To gain proficiency in the performance and documentation of a complete history and physical examination.
• To gain proficiency in the performance of problem-focused physical exams—including cardiopulmonary, abdominal, and neurological exams.
• To synthesize data into a problem list and differential diagnosis and to formulate diagnostic and therapeutic plans.
• To be able to appropriately revise assessments and plans based upon the outcomes of new diagnostic information and patient responses to prescribed therapies.
• To effectively evaluate and manage acute and chronic problems in hospitalized patients.
• To distinguish between acute and chronic patient complaints, and to use this distinction to prioritize and plan appropriate care.
• To gain proficiency in assessing the severity of acute illnesses and the need for acute interventions/critical care assistance.
• To learn to efficiently assess and stabilize patients with acute changes and complications.
• To determine the impact of medical conditions identified on the patient's operative risk or care while on the non-medical service.
• To learn to perform common hospital-based procedures needed for patient care.
• To develop skills in assessing the psychosocial and spiritual needs of patients.
• To learn to interview/counsel patients regarding tobacco use, alcohol use, illicit drug use, safer sex practices, and domestic violence.
• To promote health by appropriate immunization of hospitalized patients.
• To counsel and educate patients and families.
• To develop proficiency in preparing patients for discharge from the hospital and in arranging appropriate outpatient follow up.
• **PGY-2/3** To develop skills in performing, teaching, and supervising hospital based procedures needed for patient care.
• **PGY-2/3** To coordinate care among all members of the health care team.
• **PGY-2/3** To independently formulate specific diagnostic and therapeutic plans.
• **PGY-2/3** To develop proficiency in the use information technology to support patient care decisions.
• **PGY-2/3** To develop skill in bedside teaching.

**Medical Knowledge**

• To broaden understanding of the pathophysiology and clinical presentation of common acute and chronic medical conditions requiring hospitalization.
• To broaden knowledge of the diagnostic evaluation and evidence based management of various acute and chronic medical conditions requiring hospitalization.
• To develop an understanding of the natural history of various diseases and the influence of evidence based interventions on patient outcomes.
• To recognize risks and potential complications of diagnostic and therapeutic interventions, and to apply this knowledge to medical decision making and to counseling patients.
• To broaden knowledge in preoperative risk assessment.
• To broaden knowledge in perioperative care.
• To broaden knowledge in the care of patients with medical illnesses on non-medical services.
• To develop familiarity with the side effects and interactions of commonly prescribed medications.
• To learn to access and critically evaluate current medical information and scientific evidence relevant to the care of hospitalized patients.
• PGY-2/3 To develop an advanced level understanding of specified disease states.
• PGY-2/3 To develop advanced skill in reading and interpreting the medical literature, and applying evidence to individual patient care situations.
• PGY-2/3 To develop skill in facilitating the learning of junior team members.

Practice-Based Learning and Improvement

• To identify deficiencies in one's knowledge, skills and attitudes in the care of hospitalized patients.
• To develop strategies for correcting deficiencies in one's knowledge, skills and attitudes in the care of hospital patients.
• To perform chart review and auditing of both one's own, and one's colleagues’ charts through participation in quality assurance conferences.
• To retrospectively evaluate patient transfers to a higher acuity setting to determine the reason why pre-transfer management may have been ineffective.
• To evaluate reasons for patient readmission to the hospital.
• To evaluate the pre-mortem care of one's deceased patients though participation in team discussions, morning report case presentations, and monthly morbidity and mortality conference.
• To review outcomes of patients for whom Internal Medicine consults are provided.
• To evaluate the requesting physician's satisfaction with the consult services provided by the OU Internal Medicine Team(s).

Interpersonal Skills and Communication

• To communicate in a sensitive and effective manner, with patients and families from diverse ethnic and socioeconomic backgrounds.
• To demonstrate caring and respectful behavior.
• To effectively address the patient's chief complaint.
• To allow patients to describe symptoms and concerns without interruption.
• To demonstrate empathy in verbal and non-verbal responses.
• To ensure that a patient's questions have been satisfactorily answered.
• To effectively exchange information with team members about the condition and needs of assigned patients.
• To communicate effectively with nursing staff regarding acute patient problems and patient care orders.
• To deliver clear, well organized bedside presentations that protect patient dignity and confidentiality.
• To communicate clearly with Internal Medicine sub-specialists, and physician providers on non-Internal Medicine services regarding the reason(s) for consultation.
• To communicate verbally, the findings, assessments and recommendations to the requesting service as soon as Internal Medicine consultation by the OU Inpatient Team is completed.
To ensure that all questions asked by the consulting/requesting team have been satisfactorily answered.
To effectively exchange patient information with colleagues in the transfer of care between daytime and nighttime providers, such that safety and continuity are preserved.
To develop strong documentation skills such that the written record properly and accurately reflects the date and time, subjective and objective data, assessments and rationales (medical decision making), as well as interventions, contingency planning, and patient responses.
To provide in an accurate and succinct manner, all of the necessary information to the outpatient physician who will be assuming care post discharge.
To dictate a complete, but concise discharge summary.
PGY-2/3 To communicate effectively with other members of the health care team to ensure that the plan of care is understood.
PGY-2/3 To deliver morning report case presentations in a clear and well organized fashion with focus on the essence of the clinical problem to be addressed and the learning points of the case.
PGY-2/3 To be able to give accurate and succinct informal presentations on clinical topics to junior team members.

**Professionalism**

To be professional in all interactions with patients, families, colleagues and all members of the health care team.
To demonstrate a commitment to fulfilling the mission of the hospital and the University in providing high quality care to those in need.
To demonstrate caring and respectful behavior to patients, families, and health care workers.
To demonstrate a commitment to honoring the regulations and policies of the hospital and the training program.
To maintain a professional appearance at all times (clean, neat, and appropriately conservative with lab coat and identification badge).
To be punctual for scheduled meetings, conferences, and check out.
To demonstrate a commitment to excellence and to ethical principles of care.
To demonstrate respect for alternative, but appropriate treatment plans recommended by one's resident and faculty colleagues.
To maintain confidentiality of patient information.

**Systems-Based Practice**

To use evidence-based, cost conscious strategies in the care of hospital patients.
To remain patient focused while considering practice guidelines and managed care strategies.
To recognize interfaces within and beyond the hospital involved in the delivery of care to a given patient over time.
To be a patient advocate.
PGY-2/3 To assist the patients in dealing with complexities in their care (formularies, authorizations, non-covered services etc.).
- PGY-2/3 To understand and coordinate the utilization of resources for optimal care of hospitalized patients.
- PGY-2/3 To recognize how different insurance types affect hospital reimbursement.
- PGY-2/3 To understand the benefits and disadvantages inherent in hospital practice.
- PGY-2/3 To educate members of the multidisciplinary health care team in effort to assure comprehensive, high quality care of hospitalized patients;

**Knowledge to be assessed**

To be an effective Internist and inpatient clinician, the resident should have knowledge and understanding of the following medical illnesses/condition/topics (though not exclusively) by the completion of one's residency training. Residents should recognize how one of these medical illnesses impacts another.
<table>
<thead>
<tr>
<th>Cardiovascular:</th>
<th>Hematology/Oncology:</th>
<th>Neurology:</th>
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<tbody>
<tr>
<td>Hypertension</td>
<td>Anemia</td>
<td>Headaches</td>
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<tr>
<td>Angina</td>
<td>Leukemia</td>
<td>Peripheral Neuropathy</td>
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<tr>
<td>Acute Coronary Syndromes / MI</td>
<td>Lymphoma</td>
<td>Neuromuscular Diseases</td>
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<tr>
<td>Congestive Heart Failure</td>
<td>Myeloproliferative Disorders</td>
<td>Myopathies</td>
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<td>Arrhythmias</td>
<td>Plasma Cell Dyscrasias</td>
<td>Dizziness</td>
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<tr>
<td>Valvular Heart Disease</td>
<td>Disorders of Hemostasis</td>
<td>Dementia</td>
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<tr>
<td>Pericardial Diseases</td>
<td>Hypercoagulable states</td>
<td>Seizure</td>
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<tr>
<td>Aortic aneurysm/Dissection</td>
<td>Transfusion Medicine</td>
<td>Stroke</td>
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<tr>
<td>Peripheral Vascular Disease</td>
<td>Cancer: Lung, Breast, Pancreatic, Prostate, Colorectal, GYN</td>
<td>Infectious Diseases:</td>
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<tr>
<td>DVT/PE</td>
<td>Oncologic Emergencies</td>
<td>Neutropenic Fever</td>
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<tr>
<td>Syncope</td>
<td>Renal:</td>
<td>Meningitis</td>
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<tr>
<td>Evaluation of perioperative risk</td>
<td>Hematuria</td>
<td>Sinus and ENT infections</td>
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<tr>
<td>Pulmonary:</td>
<td>Proteinuria</td>
<td>Pneumonia</td>
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<tr>
<td>Asthma</td>
<td>Nephrolithiasis</td>
<td>Endocarditis</td>
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<tr>
<td>COPD</td>
<td>Acute Renal Failure</td>
<td>UTI/Pyelonephritis</td>
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<tr>
<td>Interstitial Lung Disease</td>
<td>Chronic Kidney Disease</td>
<td>Septic Arthritis</td>
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<tr>
<td>Pulmonary Nodules / Mass</td>
<td>Glomerulonephritis</td>
<td>C. difficile</td>
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<tr>
<td>Pneumonia</td>
<td>Glomerulonephritis</td>
<td>PID</td>
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<tr>
<td>Pleural effusions</td>
<td>Nephrotic Syndrome</td>
<td>Cellulitis</td>
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<tr>
<td>Pneumothorax</td>
<td>Electrolyte Disorders</td>
<td>Necrotizing Fasciitis</td>
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<tr>
<td>Gastroenterology:</td>
<td>Acid-Base Disturbances</td>
<td>Osteomyelitis</td>
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<tr>
<td>Esophageal Disorders</td>
<td>Endocrinology:</td>
<td>Epidural Abscess</td>
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<tr>
<td>GERD</td>
<td>Diabetes Mellitus / DKA</td>
<td>HIV and AIDS</td>
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<tr>
<td>Gastritis</td>
<td>Thyroid Disorders</td>
<td>Tuberculosis</td>
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<tr>
<td>Dyspepsia</td>
<td>Parathyroid Disease</td>
<td>Catheter Associated Infections</td>
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<tr>
<td>Peptic Ulcer Disease / Stress ulcers</td>
<td>Adrenal Insufficiency and Crisis</td>
<td>Tick borne illnesses</td>
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<tr>
<td>Acute GI Bleeding</td>
<td>Hyperaldosteronism</td>
<td>Sepsis</td>
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<tr>
<td>Constipation and Diarrhea</td>
<td>Hypopituitary Syndromes</td>
<td>Psychiatric:</td>
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<tr>
<td>Irritable Bowel Disease</td>
<td>Lipid Disorders</td>
<td>Anxiety</td>
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<tr>
<td>Diverticulosis/Diverticulitis</td>
<td>Rheumatology:</td>
<td>Depression</td>
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<tr>
<td>Ischemic bowel</td>
<td>Acute Joint Pain</td>
<td>Psychosis</td>
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<tr>
<td>Ileus and Obstruction</td>
<td>Rheumatoid Arthritis</td>
<td>Substance Abuse</td>
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<tr>
<td>Acute hepatitis and Liver failure</td>
<td>Crystal Deposition</td>
<td>Allergy:</td>
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<tr>
<td>Cirrhosis</td>
<td>Seronegative Spondyloarthrop.</td>
<td>Angioedema</td>
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<tr>
<td>Biliary Diseases</td>
<td>Connective Tissue Diseases</td>
<td>Anaphylaxis</td>
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<tr>
<td>Pancreatitis</td>
<td>Vasculitis</td>
<td>Misc:</td>
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<tr>
<td>Appendicitis</td>
<td>Back Pain</td>
<td>Altered Mental Status</td>
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<tr>
<td>Nutrition</td>
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<td>Weight Loss</td>
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In addition to the other topics listed above, all should have knowledge regarding:

- Smoking Cessation: impact of physician counseling and impact on cardiovascular and cancer risk.
- Domestic Violence: characteristics of patients at risk, identification of victims, impact of physician intervention, and resources available to victim.

**Procedural Skills**

- Nasogastric tube insertion
• Paracentesis
• Lumbar puncture
• Thoracentesis
• Central venous catheter placement
• Arthrocentesis
• Arterial puncture for blood gas

Methods of achieving objectives

Principal Teaching Methods

• Direct patient care
• Morning and evening “check-in”, “check out” and log book entries
• Resident work rounds
• Attending management and teaching rounds with case managers and clinical pharmacists
• Morning report
• Noon conference series
• Afternoon conferences (GI teaching rounds)
• Discussions regarding recommendations from consultants
• Monthly morbidity and mortality conference

Educational Materials

• OU-Tulsa library electronic databases and internet resources
• SJMC library collection of Internal Medicine textbooks (Harrison’s and Cecil’s Textbooks of Internal Medicine are recommended) and key journals (New England Journal of Medicine, Annals of Internal Medicine, and ACP Journal Club are recommended)
• The Massachusetts General Hospital Handbook of Internal Medicine (provided to all interns)
• OU-Tulsa Department of Internal Medicine Procedures Manual (provided to all residents)

Assessment tools

• The supervising attending will evaluate residents’ history and physical examination of newly admitted patients on post call rounds.
• The supervising attending will evaluate residents’ performance on selected interview and exam skills on daily rounds.
• The supervising attending will assess and monitor residents’ interaction and communication with patients, families, and other health care team members.
• The supervising attending will critique residents’ assessments and plans daily.
• The supervising attending will monitor and critique the quality and clarity of residents’ documentation.
• The supervising attending will monitor residents’ self-directed learning efforts and will specifically evaluate residents’ demonstration of daily study.
• The supervising attending will assess and monitor professionalism.
• The supervising attending will assess fulfillment of the objectives detailed above.
Evaluation process

- Faculty and residents will review the goals and objectives at the beginning of the rotation. Each resident will sign an attestation statement verifying review of the goals and objectives.
- The supervising attending will provide verbal feedback to residents on a day to day basis throughout the rotation.
- The supervising attending will formally provide mid-month feedback to each resident focusing on strengths and areas for improvement.
- The supervising attending will provide a face to face end-of-month competency-based evaluation (including procedural skills) for each resident, noting strengths and suggestions for continued improvement.
- A formal evaluation document (MyEvaluations.com) is completed and signed by the supervising attending at the conclusion of the rotation.
- Each resident signs an acknowledgement of his or her review of the attending evaluation.
- Residents are provided the opportunity to respond in writing to attending evaluations.
- Residents on a given team anonymously evaluate each other through MyEvaluations.com
- Residents document procedures performed in MyEvaluations.com

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