



Mercy Hospital – Fort Smith Internal Medicine
Program
Curriculum Goals & Objectives



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Mercy – Fort Smith Internal Medicine Residency Program Overall Educational Goals and Objectives

Goals of the Internal Medicine Residency Program

The overarching goals of the Internal Medicine program is to:

- Achieve excellence in recruitment by prioritizing a selection of diverse individuals with outstanding communication skills, empathy and evidence-based mindset.
- Provide a rotational framework to ensure a high level of competency in all areas of Internal Medicine, but still allow for an individualized educational plan for each resident
- Assure diverse clinical experience in the outpatient and inpatient settings, where resident learning is a priority and faculty are supported and equipped to help residents' growth toward becoming and independent practitioner.
- Deliver an innovative curriculum with emphasis on active, simulated and experiential learning environments that position the program to exceed the national average for the certifying exam.
- Develop a culture within medical education that promotes and expands upon the research mission of the institution.
- Utilize well-being consults and coaching to ensure that resident physicians are able to recognize the benefits of proactive psychological support to optimize physician performance and to best serve patients.
- In collaboration with the Arkansas College of Osteopathic Medicine, deliver a robust longitudinal experiential quality improvement and patient safety curriculum.



Objectives of the Internal Medicine Residency Program

It is our objective to see that residents learn:

Patient Care:

- Demonstrates a thorough and efficient history and physical examination and to effectively communicate patient care information to patients and colleagues in a logical, organized and thorough manner
- Recognizes disease presentations that deviate from common patterns and require complex decision-making.
- Practice and independent management of patients across inpatient and ambulatory clinical settings who have a broad spectrum of clinical disorders including undifferentiated syndromes.
- Differentiate the use of consultation appropriately and weighs recommendations in order to effectively manage patient care.
- Perform and manage situations requiring urgent or emergent care and effectively supervises management decision of the team appropriately.
- Perform technical skill and has successfully performed all procedures required for certification.

Medical Knowledge

- Apply the scientific socioeconomic and behavioral knowledge required to provide care for complex medical conditions and comprehensive preventive care
- Interprets and the results of complex diagnostic test accurately and determine how the results influence patient management.
- Describe the concepts of pre-test probability and test performance characteristics
- Explain the rationale and risks associated with common procedures and anticipates potential complications when performing procedures.

System-Based Practice

- Demonstrates the roles and responsibilities of and effectively partners with, all members of the team and proactively communicates with past and future care givers to ensure continuity of care.
- Demonstrates active engagement in team meetings and collaborative decision-making and utilizes available resources to coordinate care and ensures safe and effective patient care within and across delivery systems



- Conducts safe, cost-effective and evidence/outcomes-based approach to patient evaluation and management plans
- Identifies systemic causes of medical error and navigates them to provide safe patient care
- Shows advocacy for safe patient care and optimal patient care systems

Practice-Based Learning

- Show self-reflection upon one's practice, performance or own critical incidents that may lead to medical error.
- Demonstrates the ability to apply common principles and techniques of quality improvement to improve care for a panel of patients
- Demonstrates and welcomes unsolicited feedback, solicits feedback from all members of the interprofessional team and patients.
- Practices the use and critically review new medical information to reconsider the approach to a clinical problem utilizing technology.

Professionalism

- Shows empathy, compassion and respect to patients and caregivers in all situations.
- Demonstrates responsiveness and proactively works to meet the needs of patients and caregivers that supersedes self-interest.
- Organizes and prioritizes multiple competing demands in order to complete tasks and responsibilities in a timely and effective manner.
- Recognizes and appropriately modifies care plan to account for a patient's unique characteristics and needs.
- Use medical-ethical principles and legal issues (advance directives, informed consent, confidentiality, professional-patient relationship) and their application in the practice of clinical medicine

Interpersonal Communication

- Conduct therapeutic relationships with patients and caregivers, including persons of different socioeconomic and cultural backgrounds and utilizes a wide variety of patient care conversations.
- Demonstrates verbal, non-verbal and in written communication and actively engages and facilitates collaboration with all members of the health care team to enhance patient care.
- Demonstrates that health care records are organized, accurate, comprehensive, succinct, relevant, patient specific and effectively communicates clinical reasoning.



Rotation Schedule for Internal Medicine Residents

Rotation	Blocks	Outpatient %	Research %	Program Year
Inpatient Medicine	3	10 %	0 %	PGY - 1
Emergency Medicine	1	0 %	0 %	
Intensive Care Unit	2	0 %	0 %	
Night Float	1	0 %	0 %	
Neurology	1	0 %	0 %	
Cardiology	1	50 %	0 %	
Pulmonology	1	50 %	0 %	
Infectious Disease	1	10 %	0 %	
Electives	2	50%	10%	

Rotation	Blocks	Outpatient %	Research %	Program Year
Inpatient Medicine	3	10 %	0 %	PGY - 2
Emergency Medicine	1	0 %	0 %	
Intensive Care Unit	1	0 %	0 %	
Night Float	1	0 %	0 %	
Gastroenterology	1	70 %	0 %	
Geriatrics	1	50 %	0 %	
Rheumatology	1	100 %	0 %	
Continuity Clinic/Scholarship	1	50 %	50 %	
Electives - Outpatient	2	100 %	10%	
Elective	1	20%	10%	

Rotation	Blocks	Outpatient %	Research %	Program Year
Inpatient Medicine	2	10 %	0 %	PGY - 3
Day Float	1	0 %	0 %	
Intensive Care Unit	1	0 %	0 %	
Intensive Care Unit Nights	1	0 %	0 %	
Night Float	1	0 %	0 %	
Endocrinology	1	100 %	0 %	
Nephrology	1	50 %	0 %	
Hematology/Oncology	1	70 %	0 %	
Continuity Clinic/Scholarship	1	50 %	50 %	
Electives – Outpatient	2	100 %	10%	
Elective	1	10%	10%	



The Six ACGME Core Competencies

For the purposes of promotion and graduation, all residents must demonstrate progressive competency in the areas of:

- 1. Patient Care and Procedure Skills**
- 2. Medical Knowledge**
- 3. Practice - Based Learning and Improvement,**
- 4. Interpersonal and Communication Skills**
- 5. Professionalism**
- 6. Systems-Based Practice**

A. The Competencies below provide a conceptual framework describing the required domains for trusted physician to enter autonomous practice. These Competencies are core to the practice of all physicians, although the Competencies below are defined specifically by the Internal Medicine specialty. The developmental trajectories in each of the Competencies are articulated through the Milestones for Internal Medicine.

1. Patient Care and Procedure Skills (PC):

- Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to demonstrate the ability to manage patients:
 - In a variety of roles within a health system with progressive responsibility to include serving as the direct provider, the leader or member of a multi-disciplinary team of providers, a consultant to other physicians, and a teacher to the patient and other physicians.
 - In the prevention, counseling, detection, and diagnosis and treatment of gender-specific diseases
 - In a variety of health care settings to include the inpatient ward, the critical care units, the emergency setting and the ambulatory setting
 - Across the spectrum of clinical disorders seen in the practice of general internal medicine including the subspecialties of internal medicine and non-internal medicine specialties in both inpatient and ambulatory setting
 - Using clinical skills of interviewing and physical examination; and,
 - By caring for sufficient number of undifferentiated acutely and severely ill patients.
- Residents must be able to perform all medical, diagnostic, and surgical procedures considered essential for the area of practice. Residents are expected to demonstrate the ability to manage patients:
 - Using laboratory and imaging techniques appropriately; and



- By demonstrating competence in the performance of procedures as appropriate to their career paths
- Residents must treat their patients' conditions with practices that are safe, scientifically based, effective, efficient, timely, and cost effective.

2. Medical Knowledge (MK)

- Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to demonstrate a level of expertise in the knowledge of those areas appropriate for an internal medicine specialist, specifically:
 - The broad spectrum of clinical disorders seen in the practice of general internal medicine; and,
 - The core content of general internal medicine, which includes the internal medicine subspecialties, non-internal medicine specialties, and relevant non-clinical topics at a level sufficient to practice internal medicine
- Residents are expected to demonstrate sufficient knowledge to:
 - Evaluate patients with an undiagnosed and undifferentiated presentation
 - Treat medical conditions commonly managed by internist
 - Provide basic preventive care
 - Interpret basic clinical tests and images
 - Recognize and provide initial management of emergency medical problems
 - Use common pharmacotherapy; and
 - Appropriately use and perform diagnostic and therapeutic procedures.

3. Practice-Based Learning and Improvement (PBLI)

- Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and lifelong learning. Residents must demonstrate competence in:
 - Identifying strengths, deficiencies, and limits in one's knowledge and expertise
 - Setting learning and improvement goals
 - Identifying and performing appropriate learning activities
 - Systematically analyzing practice using quality improvement methods, and implementing changes with the goal of practice improvement
 - Incorporating feedback and formative evaluation into daily practice
 - Locate, appraise and assimilate evidence from scientific studies related to their patients' health problems; and,
 - Using information technology to optimize learning

4. Interpersonal and Communication Skills (ICS)



- Residents must be able to demonstrate interpersonal and communication skills that result in effective exchange of information and collaboration with patients, their families, and health professionals. Residents must demonstrate competence in:
 - Communicating effectively with patients, families, and the public, as appropriate, across a broad range of socioeconomic and cultural backgrounds
 - Communicating effectively with physician's other health professionals, and health-related agencies
 - Working effectively as a member of leader of a health care team or other professional group
 - Educating patients, families, students, residents, and other health professionals
 - Acting in a consultative role to other physician and health professionals.
 - Maintaining comprehensive, timely, and legible medical records, if applicable.
- Residents must learn to communicate with patients and families to partner with them to assess their care goals, including, when appropriate, end-of-life goals.

5. Professionalism (P)

- Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:
 - Demonstrate competence in respect, compassion, and integrity;
 - Demonstrate competence in a responsiveness to the needs of patients and society that supersedes self-interest;
 - Demonstrate competence in respect for patient privacy and autonomy;
 - Demonstrate competence in accountability to patients, society, and the profession;
 - Demonstrate competence in respect and responsiveness to diverse patient populations, including but not limited to diversity in gender, age, culture, race, religion, disabilities, national origin, socioeconomic status, and sexual orientation.
 - Demonstrate competence in ability to recognize and develop a plan for one's own personal and professional well-being
 - Demonstrate competence in appropriately disclosing and addressing conflict or duality of interest

6. System-Based Practice (SBP)

- Residents must demonstrate an awareness of and responsiveness to the larger context of system of health care, including the social determinants of health, as well as the ability to call effectively on other resources to provide optimal health care. Residents must demonstrate competence in:
 - Working effectively in various health care delivery settings and systems relevant to their clinical specialty
 - Coordinating patient care across the health care continuum and beyond as relevant to their clinical specialty



- Advocating for quality patient care and optimal patient care systems
- Working in interprofessional teams to enhance patient safety and improve patient care quality
- Participating in identifying system errors and implementing potential systems solutions
- Incorporating considerations of value, cost awareness, delivery and payment, and risk-benefit analysis in patient and/or population-based care as appropriate
- Understanding health care finances and its impact on individual patients' health decisions
- Working in teams and effectively transmitting necessary clinical information to ensure safe and proper care of patients, including the transition of care between settings; and,
- Recognizing and functioning effectively in high-quality care systems.
- Residents must learn to advocate for patients within the health care system to achieve the patient's and family's care goals, including, when appropriate, end-of-life goals.



Curricular Elements

Inpatient Morning Report

Goal: Review and discuss in-depth recent cases on the inpatient medical services, emphasizing the fundamental pathophysiology of disease.

Expectations: Conferences are held daily. All interns rotating on the inpatient services are expected to attend, and active participation is encouraged. In the last six months, interns are asked to lead the initial discussion of differential diagnosis when unknowns are presented. Senior residents are expected to attend on the inpatient services and are asked to take the lead in the first six months.

Learning Objectives: As a result of participating in Inpatient Morning Report, resident should be able to: (1) list the critical elements of the history and physical examination when evaluating a patient with a common complaint or physical finding; (2) describe the diagnostic approach for suspected conditions commonly encountered on the medical services; (3) discuss fundamental pathophysiologic mechanisms of disease in commonly encountered conditions on the medical service.

Supervision and Assessment: Attendance will not be taken at each conference, and residents are expected to attend during inpatient rotations.

Clinical/Basic Science Series

Goal: Lecture style series that covers relevant topics in a variety of subspecialties of medicine based on the ABIM Certification Examination Blueprint.

Expectations: Conferences are held weekly and all residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: (1) Demonstrate knowledge in board specific content relating to a variety of internal medicine specialties. (2) Demonstrate knowledge in basic science and pathophysiology in subspecialties of internal medicine related to board content. (3) Obtain a better understanding of ABIM Certification Examination content related to internal medicine specialties.

Supervision and Assessment: Attendance will be taken at each conference, and clinical problem-solving will be assessed by participating faculty.

MKSAP

Goal: Case-based Board Review-style interactive weekly session with custom quizzes and assesses how the residents are progressing based on their answers to questions.

Expectations: Conferences are held weekly and all residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: As a result of participating in MKSAP Conference, Residents should be able to: (1) Measure residents in their medical knowledge in core content of general internal medicine, which includes the internal medicine subspecialties. (2) Practice board question quizzes weekly, monthly exams and annual mock boards to assess resident's readiness. (3) demonstrate a level of expertise in the knowledge of those areas appropriate for an internal medicine.

Supervision and Assessment: Attendance will be taken at each conference. Progress will be assessed based on their answers to quizzes/exams and is a tool for the Program Director and Clinical Competency Committee.



Residents Conference

Goal: This is a resident-led discussion utilizing a case-based format. These are cases that residents draw from their own clinical experiences both on wards and in the clinic. Learning focuses on a variety of topics from developing diagnostic skills to specifics of a medical condition. Sessions are conversational style, involving residents, faculty members and program directors who work through cases together and share teaching points along the way.

Expectations: Conferences are held three times per month.

Learning Objectives: (1) Present patient differential diagnosis, work-up difficult cases and discuss clinical reasoning and management strategies. (2) Describe the diagnostic approach to common complaints and symptoms encountered and discuss the management of common conditions encountered in the hospital or ambulatory setting; (3) Review the basic pathophysiology of the most common medical conditions encountered in the hospital or ambulatory setting.

Supervision and Assessment: Attendance will be taken at each conference.

Grand Rounds

Goal: To provide updates in diagnosis, treatment, and research and promote collegiality among faculty and other physicians within the Fort Smith area.

Expectations: Conferences are held once per month. All residents are expected to attend unless on vacation or a day off, duty hours permitting.

Learning Objectives: (1) Disseminate knowledge, change behavior and improve patient outcomes. (2) Discuss diagnosis and management protocols and describe up-to-date medical information on specific medical problems and their management. (3) Apply protocols in clinical practice and (when applicable) in the clinical teaching arena

Supervision and Assessment: Attendance will be taken at each conference.

Journal Club

Goal: Develop the skills needed to use information technology to locate, appraise, and assimilate evidence from studies to apply it to their patient's health problems.

Expectations: Conferences are held once per month. All residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: As a result of participating in Journal Club, Residents should be able to (1) Identify the type of study design used to published clinical investigations; (2) Identify the appropriate study design when planning a clinical investigation; (3) define positive and negative predictive values.

Supervision and Assessment: Attendance will be taken at each conference.

M&M Conference

Goal: In a case-based format, discuss processes within our health care system that may adversely impact patient safety and contribute to medical errors.

Expectations: Conferences are held once per month. All residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: As a result of participating in M&M Conference, Residents should be able to: (1) describe the use of a structured systems audit in the review of medical errors and adverse



patient outcomes; (2) identify systems issues in the intern's practice that may lead to adverse events; (3) discuss adverse events in a constructive, professional manner.

Supervision and Assessment: Attendance will be taken at each conference.

Tumor Board

Goal: Residents will have an opportunity to meet with a multi-disciplinary team in a case-based format to discuss cancer cases.

Expectations: Conferences are held weekly, but residents are expected to attend one or two times per month.

Learning Objectives: (1) Determine best possible cancer treatment and care plan for individual patients. (2) Apply the current standards of oncology care to optimize the management of patient with various cancer types. (3) Communicate the importance of a multidisciplinary approach and improve the collaborative performance of the interprofessional oncology care team in the management of patients with cancer.

Supervision and Assessment: Attendance will not be taken at conference, but residents are expected to attend and present cases.

ECG Rounds

Goal: Residents will have an opportunity to meet with residents, internal medicine physicians and Cardiologist to participating in ECG rounds to review, identify and discuss ECGs.

Expectations: ECG Rounds are held monthly.

Learning Objectives: (1) Identify the following conditions on a ECG: ectopic atrial tachycardia, ectopic atrial focus, AVNRT, AVRT, wandering atrial pacemaker, accelerated AV junctional rhythm, WPW patten, ventricular bigeminy/trigeminy, AVIR, variable AV Block, short PR interval (not WPW), electrical alternans, LAFB, LAFB, Bifascicular block, SVT with aberrancy, ST or T changes suggesting ventricular aneurysm, ST and/or T changes from LVH or IVCD, evolution of pericarditis, ventricular escape rhythms, hypokalemia, hypercalcemia, ASD, hypothermia.

Supervision and Assessment: Attendance will not be taken at this conference, but residents are expected to attend during inpatient rotations.

Radiology Round

Goal: Residents will have an opportunity to meet with residents, internal medicine physicians and radiologist to participating in imaging rounds to review and discuss imaging related to patient care.

Expectations: Conferences are held once per month. All residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: (1) Discuss indications for and types of hospital inpatient imaging studies. (2) Discuss clinical information and direct further imaging workup. (3) Communicate essentials of imaging interpretations.

Supervision and Assessment: Attendance will not be taken at conference, but residents are expected to attend during inpatient rotations.



Simulated Patient Experience

Goal: Residents utilize simulation center annually as a part of orientation and quarterly each academic year to assess their skills and progression. The simulation center incorporates the use of both standardized patients and high-tech manikins.

Expectations: This educational activity is held once per quarter. All residents are expected to attend unless on vacation or on a day off, duty hours permitting.

Learning Objectives: (1) Improve skills related to patient assessment, generation of differential diagnoses, and treatment in the setting of uncertainty. (2) Gain specific knowledge and skills required to care for common acute clinical scenarios encountered on the inpatient, medical and cardiac intensive care units. (3) Develop and improve skills in teamwork and communication.

Supervision and Assessment: Attendance will be taken. Each resident will receive an evaluated by faculty or senior residents.

Ambulatory Conference

Goal: Residents utilize Yale Office Based Curriculum and review the cases in conjunction with the Clinical/Basic Science Series. These cases will be reviewed by faculty with residents at the beginning of the resident's clinic each week.

Expectations: All residents are expected to attend unless they do not have clinic scheduled for that particular week or on vacation, a day off, duty hours permitting.

Learning Objectives: (1) Describe the diagnostic approach to common complaints and symptoms encountered in the internal medicine and subspecialty ambulatory setting. (2) Discuss the management of common conditions encountered in the clinic. (3) Review basic pathophysiology of the most common medical conditions encountered in the clinic.

Supervision and Assessment: Attendance will be taken at each conference, and clinical problem-solving will be assessed by participating faculty and chief residents.



Inpatient Medicine PGY – 1 - 3

Overall Goals and Objectives:

Goals:

- Develop appropriate interpersonal skills to establish a quality doctor-patient relationship with sensitivity to emotional, physical, cultural and socioeconomic environment.
- Develop a broad-based knowledge of common acute and chronic medical conditions to be able to diagnose and treat these problems.
- Incorporate evidence-based medicine in the risk-assessment, treatment and management of patients.
- Develop the knowledge, attitudes, and skills necessary to effectively diagnose and manage common inpatient medical problems of the adult.
- Manage and coordinate with specialists, service lines, and care management in delivering the appropriate interventions to patients under care.
- Become competent and confident in the care and disposition of the hospitalized patient.

Objectives:

- The resident will gain knowledge of common inpatient medicine problems through one-on-one discussions and precepting with the attending physician, teaching rounds and also by independent reading.
- The resident will be expected to develop teaching skills through the participation of teaching medical students and junior residents in the inpatient setting.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced-Based Learning and Systems-Based Practice). These are done as a group evaluation by the attendings so that progress and incorporation of feedback over the course of the rotation can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient setting. Assess and manage acute and chronic diseases and disorders commonly encountered in the inpatient setting, through an understanding of epidemiology and pathophysiology.

Objectives:

PGY-1



- Acquire accurate and relevant history from the patient and in an efficiently customized, prioritized and hypothesis driven fashion
- Seek and obtain appropriate, verified, and prioritized data from secondary sources (e.g. family, records, pharmacy)
- Perform an accurate physical examination that is appropriately targeted to the patient's complaints and medical conditions. Identify pertinent abnormalities using common maneuvers
- Accurately track important changes in the physical examination over time in the inpatient setting.
- Synthesize all available data, including interview, physical examination, and preliminary laboratory data, to define each patient's central clinical problem
- Develop prioritized differential diagnoses, evidence-based diagnostic and therapeutic plan for common inpatient conditions
- Formulate a comprehensive problem list for each patient.
- Make appropriate clinical decisions based upon the results of common diagnostic testing, including but not limited to routine blood chemistries, hematologic studies, coagulation tests, arterial blood gases, electrocardiograms, chest radiographs, pulmonary function tests, and urinalysis.
- Recognize situations with a need for urgent or emergent medical care including life threatening conditions
- Recognize when to seek additional guidance
- With supervision, manage patients with common clinical disorders seen in the practice of inpatient medicine.

PGY-2

- Obtain relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated and detailed information that may not often be volunteered by the patient.
- Demonstrate and teach how to elicit important physical findings for junior members of the healthcare team.
- Modify problem formulation, differential diagnosis, and care plan based upon the evolution of clinical data over time.
- Make appropriate clinical decisions based upon the results of more advanced diagnostic tests.
- Provide appropriate care for health maintenance and disease prevention
- With supervision, manage patients with common clinical disorders seen in the practice of inpatient general medicine
- With minimal supervision, manage patients with complex clinical disorders seen in the practice of inpatient general medicine.
- Provide specific, responsive consultation to other services.



PGY-3

- Role model gathering subtle and reliable information from the patient for junior members of the healthcare team.
- Routinely identify subtle or unusual physical findings that may influence clinical decision making, using advanced maneuvers where applicable.
- Recognize disease presentations that deviate from common patterns and that require complex decision making.
- Consider the costs, risks, and benefits when recommending diagnostic tests.
- Initiate management and stabilize patients with emergent medical conditions
- Manage patients with conditions that require intensive care
- Independently manage patients with a broad spectrum of clinical disorders seen in the practice of general inpatient medicine, including gender-specific diseases
- Coordinate the care of patients with complex and rare medical conditions
- Customize care in the context of the patient's preferences and overall health.
- Provide inpatient medicine consultations for patients with more complex clinical problems requiring detailed risk assessment.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as part of life-long learning.

Objectives:

PGY-1

- Understand the relevant pathophysiology and basic science for common medical conditions
- Demonstrate sufficient knowledge to diagnose and treat common conditions that require hospitalization.
- Understand indications for the basic interpretation of common diagnostic testing, including but not limited to routine blood chemistries, hematologic studies, coagulation tests, arterial blood gases, ECG, chest radiographs, pulmonary function tests, urinalysis and other body fluids.
- Gain an understanding of the sources of medical information, research, and evidence-based guidelines and effective utilization of this information into practice.
- Develop knowledge of patient directed information and education to enhance the patient's understanding and management of their condition.

PGY-2

- Demonstrate sufficient knowledge to evaluate common conditions requiring hospitalization



- Demonstrate sufficient knowledge to diagnose and treat undifferentiated and emergent conditions
- Demonstrate sufficient knowledge to provide health maintenance and preventive care
- Demonstrate sufficient knowledge to identify and treat common medical conditions that require higher acuity of inpatient care.
- Understand indications for and have basic skills in interpreting more advanced diagnostic tests
- Understand prior probability and test performance characteristics.

PGY-3

- Demonstrate sufficient knowledge to evaluate and coordinate the care of complex medical conditions and multiple coexistent conditions.
- Demonstrate sufficient knowledge of socio-behavioral sciences including but not limited to health care economics, medical ethics, and medical education.
- Accurately identify the following patterns on an EKG:
 - Myocardial infarction
 - Arrhythmias, including supraventricular tachycardias, atrial fibrillation and flutter, heart blocks, ventricular tachycardia, and ventricular fibrillation
- Diagnose the following conditions on x-ray and/or CT:
 - Pneumonia
 - Heart failure
 - Chronic obstructive pulmonary disease
 - Vertebral fractures
 - Ileus
 - Intestinal obstruction
- Interpret an ABG
- Interpret a PFT

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives:

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.



PGY-2

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters.

Objectives:

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

PGY-2

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.



- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

PGY-3

- Uphold ethical expectations of research and scholarly activity.
- Provide leadership for a team that respects patient dignity and autonomy.
- Maintain ethical relationships with industry
- Recognize and manage subtler conflicts of interest.
- Effectively advocate for individual patient needs.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).
- Recognize and manage conflict when patient values differ from their own.
- Embrace physicians' role in assisting the public and policy makers in understanding and addressing causes of disparity in disease and suffering
- Advocate for appropriate allocation of limited health care resources.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the inpatient setting and compare this to current practice.

PGY-2



- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to patients.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions

PGY-2

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.



- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the inpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

Intensive Care Unit PGY – 1 – 3

Overall Goals and Objectives:

Goals:

- Function as a member of a multidisciplinary team caring for critically ill patients.
- Develop a broad-based knowledge, exposure and skills needed for critically ill patients with a wide variety of disease states.
- Incorporate evidence-based medicine and formulate and understand the differential diagnosis, diagnostic approach and treatment plan of specific conditions pertaining to critically ill patients.

Objectives:

- The resident must show progressive ability to acutely manage the critically ill patient and upon graduation, to care for a critically ill patient.
- The resident will be expected to develop teaching skills through the participation of teaching medical students and junior residents.
- The resident must be able to set initial ventilator settings for patients with acute respiratory failure, indications for tracheal intubation and non-invasive ventilation.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a individual evaluation by the critical care attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:



To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the intensive care setting. Assess and manage diseases and disorders commonly encountered in the outpatient setting, through an understanding of epidemiology and pathophysiology of common critical care diseases.

Objectives:

PGY-1

- Gather essential and accurate information about patients through history, physical exam and review of secondary data.
- Identify and prioritize patient's medical problems and develop rational plans for evaluation and management.
- Work effectively with nurses and other health professionals in daily activities of patient care.
- Attend to patient needs and provide patient-centered care.
- Demonstrates the ability to obtain and document an accurate and complete history from patient, caretaker or outside resources with moderate input from faculty.
- Identify major abnormalities in the physical exam, including exams in patients with altered consciousness with intense input from faculty.
- Reliably recognizes critical illness and appropriately seeks assistance.
- Masters the cognitive, counseling and technical skills for:
 - Central line placement in at least one site (Internal Jugular, Subclavian, or Femoral)
 - Arterial line placement
 - Nasogastric tube placement
 - ACLS and BLS
 - Initiation of ventilator management
- Interprets:
 - Blood Gases
 - CXR for evidence of pneumonia, and evaluation of Endotracheal and Central lines
 - Spinal Tap for evidence of meningitis
 - Pleural Fluid for evidence of complicated effusion and or empyema
 - Bronchoalveolar (BAL) sample differential.
- Understands the indications for:
 - Lung Biopsy
 - Chest Tube in complicated lung infections
 - Emergent lung infections; Documents Appropriately
- Uses relevant questions to obtain consultation and follows up on recommendations.

PGY-2

- Supervise interns in their work of gathering, interpreting, and managing information for patient care.
- Apply scientific evidence to the work of patient evaluation and management and assist interns in formulating plans of care.



- Triage patients to appropriate levels of care and ensure appropriate communication with colleagues and attending physicians.
- Manage inpatient medical emergencies
- Work effectively with multidisciplinary team in planning patient discharge.
- Assist interns as necessary in completing daily tasks of patient care to facilitate the primary care-giving relationship between the patient and intern.
- Demonstrates the ability to obtain and document an accurate and complete history from patient, caretaker or outside resources with moderate input from faculty.
- Identifies major and subtle abnormalities in the physical exam with moderate input from faculty.
- Reliability recognizes critical illness and can independently initiate management strategies. Ongoing management goals are correcting with moderate faculty input.
- Begins to demonstrate the cognitive, counseling and technical skills necessary for:
 - Endotracheal intubation
- Masters the cognitive, counseling and technical skills necessary for:
 - Central line placement in Internal Jugular, Subclavian, and Femoral
 - Lumbar puncture
 - Thoracentesis
 - Leading a rapid response and code blue teams
 - Management of ventilators
- Interprets
 - Echo for pericardial effusion, left ventricular dysfunction, IVC variability to assess volume status
 - CT of chest, abdomen, pelvis and head for abnormality.
- Achieves increasing independence in all procedures. Teach other procedures for which they have been signed off on.
- Coordinates consultation recommendations with medical team care

PGY-3

- Supervise interns in their work of gathering interpreting and managing information for patient care.
- Apply scientific evidence to the work of patient evaluation and management and assist interns in formulating plans of care.
- Triage patients to appropriate levels of care and ensure appropriate communication with colleagues and attending physicians.
- Manage inpatient medical emergencies.
- Work effectively with multidisciplinary team in planning patient discharge.
- Assist interns as necessary in completing daily tasks of patient care to facilitate the primary care-giving relationship between the patient and intern.
- Demonstrate the ability to obtain and document an accurate and complete history from patient, caretaker or outside resources independently.



- Independently carries out an accurate physical examination.
- Reliably recognizes critical illness and can independently initiate emergent and ongoing management strategies with minimal faculty input.
- Critically analyses consultant recommendations and manages conflicting opinions.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Build cognitive schemas to facilitate approaches to common symptoms and syndromes.
- Demonstrate independent critical thinking in patient evaluation and management.
- Applies relevant clinical and basic science knowledge in the following common critical care conditions:
 - Acute respiratory failure secondary to obstructive lung disease, pulmonary infections, including tuberculosis and bacterial pneumonia, acute lung injury and ARDS, occupational and environmental lung disease, and iatrogenic respiratory diseases.
 - Acute and severe organ failure, including renal hepatic and coagulation failure
 - Sepsis, septic shock and multi-organ failure
 - Severe electrolyte and endocrinologic disturbances/emergencies
 - Drug and alcohol overdose
 - Severe gastrointestinal hemorrhage, upper and lower tract
 - Complications of HIV infection.

PGY-2

- Consolidate basic fund of knowledge related to evaluation and management of common and cannot miss diagnoses.
- Apply clinical guidelines and principles of evidence-based medicine to patient evaluation and management.
- Demonstrate a progression in content knowledge and analytical thinking with well formulated differential diagnoses and management plans.

PGY-3

- Review core knowledge base related to common and cannot miss diagnoses.
- Develop more detailed knowledge of selected topics within inpatient internal medicine
- Critically appraise data from recent literature and evidence behind clinical guidelines.
- Understanding and application of medical literature related to common medical conditions.



Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

PGY-2

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the intensive care unit.

**Objectives:****PGY-1**

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

PGY-2

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).

Practice-based Learning and Improvement**Goals:**

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.



Objectives:

PGY-1

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

PGY-2

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of critical care patients.

Objectives:



PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions

PGY-2

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

Continuity Clinic PGY – 1 – 3

Overall Goals and Objectives:

Goals:

- Develop appropriate interpersonal skills to establish a quality doctor-patient relationship with sensitivity to emotional, physical, cultural and socioeconomic environment.
- Develop a broad-based knowledge of common ambulatory problems and chronic medical conditions to be able to diagnose and treat these problems.
- Incorporate evidence-based medicine in the risk-assessment, treatment and long-term management of patients.

Objectives:

- The resident will gain knowledge of common ambulatory problems through one-on-one discussions and precepting with the attending physician and also by independent reading.



- The resident will be expected to develop teaching skills through the participation of teaching medical students in the clinic.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the continuity attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the ambulatory setting. Assess and manage diseases and disorders commonly encountered in the outpatient setting, through an understanding of epidemiology and pathophysiology of ambulatory diseases.

Objectives:

PGY-1

- Acquire accurate and relevant history from the patient
- Perform a relevant and proper physical examination
- Develop differential diagnoses based on patient's presenting symptoms
- Begin to develop management plans for each patient
- Understand common office-based procedures and begin to develop these procedural skills

PGY-2

- Obtain a complete history from the patient in an efficiently customized, prioritized and hypothesis driven fashion
- Perform an accurate physical examination that is appropriately targeted to the patient's complaints and medical conditions.
- Synthesize all available data, including interview, physical examination, and preliminary laboratory data, to define each patient's central clinical problem.
- Outline an evidence-based management plan
- Counsel patients concerning their diagnosis, planning diagnostic testing and recommended therapies.
- Exhibit proficiency in office-based procedures
- Utilize validated instruments in the assessment of function and quality of life to monitor and adjust therapy.



PGY-3

- Seek and obtain appropriate, verified, and prioritized data from secondary sources (e.g., family, records, pharmacy)
- Practice evidence-based medicine in order to manage chronic diseases across a panel of patients
- As the primary care physician, effectively lead patient care utilizing and managing consultants
- Demonstrate competency in performing office-based procedures effectively

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Demonstrate knowledge of the pathophysiology, evaluation and management of conditions commonly seen in the ambulatory setting, including but not limited to type 2 diabetes and hypertension
- Exhibit knowledge of common health screening guidelines
- Understand indications for common vaccines, including but not limited to tetanus, pneumococcal, influenza, MMR, hepatitis A, hepatitis B.

PGY-2

- Demonstrate knowledge of the standard of care and treatment goals for common ambulatory conditions
- Develop and demonstrate knowledge of treatment guidelines for common conditions, including but not limited to asthma, high cholesterol and backache
- Know the recommendations for age appropriate screening tests, counseling, and vaccination of healthy adults.

PGY-3

- Display proficiency in the approach to the diagnosis and management of common ambulatory presentations
- Demonstrate understanding of indications for and basic interpretation of standard laboratory tests ordered in the ambulatory setting



Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives:

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

PGY-2

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the continuity clinic.

Objectives

PGY-1

- Develop skills that encourage ongoing personal and professional growth.



- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

PGY-2

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1



- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

PGY-2

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of continuity patients.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team



- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions

PGY-2

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

Night Float PGY – 1 – 3

Overall Goals and Objectives:

Goals:

- Residents will learn the fundamentals of emergency management of acute medical patients after hours in the Night Float rotation.
- Develop a broad-based knowledge and experience in managing acutely ill patients spanning the entire domain of Internal Medicine.
- Incorporate evidence-based medicine and develop the clinical skills necessary to diagnose and treat undifferentiated medical patients with a wide range of illnesses.

Objectives:

- The resident will gain knowledge in learning how to diagnose, treat, and manage various medical problems in patients who are admitted to internal medicine service for whom internal medicine consultation services are requested.
- The resident learns to effectively transfer of care of patients, triage of acutely ill patients and guide independent management will be emphasized.



- The residents will gain skill and experience in evaluating and managing hospitalized patients independently as well as honing their skills in prioritization of tasks, time management and systems-based practice.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a evaluation by the nocturnist attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient setting. Assess and manage diseases and disorders commonly encountered in the inpatient setting, through an understanding of epidemiology and pathophysiology of internal medicine diseases.

Objectives:

Residents at all levels of training will demonstrate sensitivity and responsiveness to patients' age, culture, gender and disabilities. Residents will work effectively with allied health care professionals and physician consultants to provide effective patient-focused care.

PGY-1

- Residents will consistently gather essential and accurate information. The database will be organized in manner consistent with accepted medical convention and charted in a timely and efficient manner. The information will be comprehensive and include data gathered by other providers and laboratory investigations.
- Perform a comprehensive physical exam with a consistent sequence. Residents at this level will identify normal from abnormal and will describe the physiological and anatomical basis for findings. Residents will demonstrate the ability to augment their physical exam to elicit data not obtained with standard movements
- Be able to identify all a patient's problems and develop a prioritized differential diagnosis. PGY-1 residents will begin to develop therapeutic plans that are evidenced or guideline based. Residents will establish an orderly succession of testing based on their history and exam findings. They will demonstrate appropriate use of diagnostic and therapeutic procedures.
- Residents will give patients accurate instructions regarding usage of their medications and follow up care. They will document their counseling conversations and use flow sheets as necessary.
- Demonstrate use of computer-assisted databases for diagnosis and decision-making. They will regularly utilize drug information and drug-drug interaction programs.



- Demonstrate knowledge of procedural indications, contraindications, necessary equipment, process for handling specimens and patient after-care. They will participate in informed consent and assist the patient with decision making through their knowledge. Residents will attend to the comfort of the patient. PGY-1 residents will be supervised for all procedures until certified competent by the Program. Procedures will be thoroughly documented.
- Demonstrate the ability to use electronic medical record (EMR) tools to ensure that their patients receive recommended screening tests and other preventative practices. Residents will utilize EMR tools for chronic illness care in an effort to decrease the incidence of complications in those with chronic disease states.

PGY-2

- Residents will be precise, logical, and efficient in their data collection in addition to the above.
- Residents will regularly integrate medical facts and clinical data while weighing alternatives and keeping in mind patient preference. They will regularly incorporate considerations of costs, risks, and benefits when considering diagnostic tests and therapies. They will consistently monitor and follow-up patients appropriately.
- Effectively counsel and educate patients about pertinent health issues, tests and treatments. They will recommend appropriate screening exams by gender and age.
- Residents, in addition to the above, will utilize electronic databases for patient educational material.
- Residents will be supervised where skill level dictate. They will demonstrate extensive knowledge and be facile in the performance of procedures while minimizing risk and discomfort to patients. They will assist their junior peers in skill acquisition.
- Demonstrate appropriate age-based screening and preventative care. These residents will remain vigilante for changes in recommendations from federal and professional societies and apply recommendations to their patient population.

PGY-3

- Residents will be precise, logical, and efficient in their data collection in addition to the above.
- Residents additionally will strive to perform a focused physical exam at the level similar to a sub-specialist, and understand the sensitivity and specificity of maneuvers
- Demonstrate the above and in addition, will demonstrate appropriate reasoning in ambiguous situations, while continuing to seek clarity. Residents at this level of training will not overly rely on tests and procedures. They will assist junior trainees and medical students to become efficient managers through the appropriate use of clinical judgment and effective decision making. PGY-3 residents will consistently establish monitoring procedures and demonstrate the ability to change therapeutic programs for ineffectiveness or adverse side effects.
- Residents, in the addition to the above, will consistently and thoroughly educate patients and their families, using patient education as a form of intervention and partnering.



- Residents, in addition to the above, will utilize electronic databases for patient educational materials.
- Residents will be supervised where skill level dictates. They will demonstrate extensive knowledge and be facile in the performance of procedures while minimizing risk and discomfort to patients. They will assist their junior peers in skill acquisition.
- Demonstrate an understanding of public health and its broad implications to the population being served.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Demonstrate knowledge of common procedural indications, contraindications, equipment, specimen handling and patient after-care.
- Demonstrate knowledge of basic and clinical sciences.
- Demonstrate satisfactory knowledge of common medical conditions, sufficient to manage urgent complaints with supervision. Residents must exhibit sufficient content knowledge of common conditions to provide care with minimal supervision by completion of the PGY1 year.
- Demonstrate an investigatory and analytic approach to clinical situations
 - Residents will exhibit use of UNR and hospital library resources
 - Exhibit self-motivation to learn
 - Demonstrate sufficient analytic skills necessary to develop appropriate assessments and plans for common medical diagnoses and complaints

PGY-2

- Demonstrate a progression in content knowledge and analytical thinking in order to develop well-formulated differential diagnoses for multi-problem patients.
- Demonstrate understanding and responsiveness to socio-behavioral issues
- Develop knowledge of statistical principles. Understand and appropriately use sensitivity, specificity, predictive values, likelihood ratio, number needed to treat, and odds ratios.
- Demonstrate an investigatory and analytic approach to clinical situations
 - Independently present up-to-date scientific evidence to support hypotheses.

PGY-3

- Demonstrate growing knowledge in the area of their chosen career path.



- Demonstrate knowledge regarding performance of procedures while minimizing patient risk and discomfort.
- Exhibit knowledge of effective teaching and evaluation methods, including RIME, one-minute preceptor, and evaluation techniques.
- Successfully meet ECG reading requirements according to the ECG conference series requirements.
- Demonstrate an investigatory and analytic approach to clinical situations.
 - Regularly displace self-initiative to stay current with new medical knowledge.
 - Regularly demonstrate knowledge of the impact of study design on validity or applicability to practice.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

PGY-2

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.



- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the hospital.

Objectives:

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

PGY-2

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).



Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the inpatient setting and compare this to current practice.

PGY-2

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.



Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of inpatient medicine patients.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions

PGY-2

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the inpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.



Emergency Medicine PGY 1 & 2

Overall Goals and Objectives:

Goals:

- Understand the principles of diagnosis and management of acute and emergent medical conditions is an essential part of the training of general internist.
- Develop a broad-based knowledge of common emergent/urgent medical problems and to be able to diagnose, treat triage these problems.
- The purpose of the Emergency Medicine rotation is to teach the internal medicine resident an organized and practical approach to the care of the acute undifferentiated patient.

Objectives:

- The resident will gain knowledge of common emergent/urgent medical problems through one-on-one discussions and precepting with the attending physician and also by independent reading.
- The resident will gain clinical experience with a broad spectrum of clinical entities presenting to the ED and learn procedure skills common to the practice of acute care/emergency medicine.
- The resident will be expected to develop teaching skills through the participation of teaching medical students and/or junior residents in the emergency department.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as an evaluation by the Emergency Medicine attendings, so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the emergency care setting. Assess and manage diseases and disorders commonly encountered in the emergency department setting, through an understanding of epidemiology and pathophysiology of emergent disorders.

Objectives:

PGY-1



- Develop the skills to evaluate and manage common emergent/urgent disorders seen in the emergency department setting.
- Achieve competence in the triage of emergency/urgent care patients, both under ordinary and disaster circumstances.
- Obtain complete medical histories, interpret vital signs, perform appropriate physical examinations, develop a differential diagnosis and effectively medically manage patients.
- Achieve competence in the diagnosis and management of acute trauma, including lacerations, head and neck injuries, sprains and fractures.
- Demonstrate the skills to rapidly assess, resuscitate and stabilize a critically ill or injured patient in the Emergency Department.
- Acquire the skills to perform appropriate procedures under supervision of attending and independently, including knowledge of:
 - Indications,
 - Potential adverse effects
 - Interpretation of resultant findings for:
 - EKG interpretation
 - Common radiographs

PGY-2

- Apply the Principles of the following with direct or indirect supervision (and know when applicable):
 - ACLS, BLS
 - Paracentesis
 - Thoracentesis
 - Lumbar Puncture
 - Intubation
 - Bladder Catheterization
 - Joint Aspiration and Injection
 - Abscess Incision and drainage
 - Laceration repair
 - Wound debridement
 - Foreign body removal
 - Fracture reduction
 - Dislocation reduction
 - Splinting and Casting
 - Toenail removal
 - Central Line Placement
- Participate in supervision of medical students and/or PGY-1 residents on minor procedures such as IV access and placement of foley catheters.
- Synthesize all available data, including interview, physical examination, and preliminary laboratory data, to define each patient's central clinical problem



- Learn to function as a member of the ED team, utilizing nurses and other ancillary personnel as appropriate to expedite patient care.
- Learn to utilize consultants and provide referrals so as to obtain appropriate care and follow-up for the ED patient.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Residents will gain the knowledge to evaluate, diagnose and manage common emergent/urgent disorders seen in the emergency department.
- Recognize and manage medical and surgical problems of a mild to moderate severity using appropriate specialty consultation when necessary and working with allied professionals in the management of these problems.
- Identify the psychosocial needs of patients and families in the emergency room setting.
- Understand the differential diagnosis, diagnostic approach (including history, physical exam, laboratory and imaging assessments, and clinical reasoning) and management of patients with common diagnosis including:
 - coma and altered states of consciousness
 - drug overdose and acute intoxication
 - myocardial ischemia and infarction
 - hypertensive emergencies and urgencies
 - shock
 - sepsis
 - syncope
 - CHF and acute pulmonary edema
 - asthma and COPD exacerbation
 - fever
 - seizure
 - pulmonary embolism
 - poisonings
 - environmental injuries
 - acute GI bleeding, headache
 - stroke and community-acquired pneumonia
 - Muscle and joint pain and swelling
 - Diplopia, loss of vision



- Chest pain/cardiac arrest
- Cough/hemoptysis
- Dyspnea/wheezing
- Palpitation
- Abdominal pain
- Nausea/vomiting/diarrhea
- Dysuria/hematuria
- Vaginal bleeding and discharge
- Hematochezia/melena/rectal pain
- Skin rash
- Urinary incontinence and retention
- Headache

PGY-2

- Recognize, initially manage and understand criteria for referral for common behavioral and surgical problems of adults, including psychosis, mania, alcohol and drug intoxication and withdrawal, acute abdomen, fractures, trauma and wounds
- Demonstrate an increasing fund of knowledge in the range of common problems encountered in the Emergency Department and utilize this knowledge in clinical reasoning.
- Residents are expected to become familiar with the diagnostic and therapeutic approach to Trauma – Level II, III, IV patients and know when to properly refer patients.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

PGY-2

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.



- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the Emergency Department.

Objectives

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

PGY-2

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of



practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

PGY-2

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of emergency room patients.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions

PGY-2



- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

Cardiology PGY - 1

Overall Goals and Objectives:

Goals:

- Familiarize residents with the basic mechanisms, clinical manifestations, diagnostic strategies and management of cardiovascular disease as well as disease prevalence and prevention.
- Depth of exposure should be such that they can develop competency in the prevention of cardiovascular disease, indications for procedures management of common disease, management of the acutely ill patient and appropriate indications for referral.

Objectives:

- The resident will have the opportunity to evaluate and manage patients across a spectrum of cardiovascular disorders in both the inpatient and outpatient venues.
- Provide residents with an understanding of cardiovascular physiology and its broad systemic manifestations.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as an evaluation by the Cardiology attendings, so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

PGY- 1

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health to the cardiovascular patient.

Objectives:



- Demonstrate compassionate, culturally sensitive, and appropriate care for patients to prevent and treat cardiovascular disease.
- Residents will demonstrate the ability to take a pertinent cardiovascular history and perform a focused physical exam.
- Differentiate between stable and unstable symptoms and elicit the following historical details:
 - Risk factors for the development of cardiovascular disease
 - Personal and family history of cardiovascular disease
 - Symptoms associated with cardiovascular disease and their duration, including NYHA class
 - Complete Medical History
- Gather and interpret data from outside records or consultative services.
- Recognize limits in clinical experience and know when/how to seek assistance.
- Recognize deterioration in clinical condition and take appropriate action (diagnostic and/or therapeutic).
- Residents should be able to appreciate the following physical findings:
 - Assessment of peripheral pulses, asymmetry of blood pressures, jugular venous distention, murmurs, physical reflection of volume status, signs of shock, vascular bruit.
- Residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures, and become competent in their safe and effective use:
 - Cardiac Catheterization, pacer placement, thrombolytic treatment
- Specifically:
 - Understand the pathophysiology, prevalence and natural history of cardiac diseases.
 - Diagnosis and manage common cardiovascular diseases (coronary heart disease, congestive heart failure, cardiac arrhythmias, syncope, hypertension, hyperlipidemia and peripheral vascular disease).
 - Recognize and implement aggressive CV preventative medicine, including different screening methods. Recognize cardiac risk factors and implement appropriate preventative medicine strategies.
 - Understand and apply current ACC/AHA guidelines to patient care.
 - Understand the diagnostic and therapeutic roles of different CV procedures, invasive and non-invasive including their relative risks and benefits.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge of patient care. Residents



must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- Develop an understanding of the basic pathophysiology and approach to the following common cardiovascular conditions:
 - Cardiomyopathy
 - Congestive heart failure, systolic and diastolic
 - Coronary artery disease
 - Dysrhythmias
 - Endocarditis
 - Hypertension
 - Peripheral vascular disease
 - Valvular heart disease
- Develop an understanding of the pathophysiology, clinical presentation, and targeted therapy for the following cardiovascular conditions:
 - Myocarditis
 - Pericardial disease, including constriction and tamponade
 - Pulmonary hypertension
- Develop an understanding of the pathophysiology, clinical presentation, and targeted therapy for the above cardiovascular conditions, with attention to differences in patient population where appropriate. They will also become familiar with:
 - Adult congenital heart disease
 - Cardiac transplantation, with focus on appropriateness for transplant and long-term management
- Resident will become comfortable with timely triage and therapy for acute cardiovascular conditions, including:
 - Acute aortic dissection
 - Acute congestive heart failure
 - Acute coronary syndrome
 - Cardiac tamponade
 - Hypertensive urgency/emergency
 - Unstable dysrhythmia
 - Shock
- PGY-1 will be able to understand the indications for ordering and the interpretation of the following laboratory values and procedures:
 - BNP
 - CK
 - ECG interpretation
 - Echocardiogram



- Stress testing
- Troponin
- Residents should become fluent in the issues of health maintenance relevant to cardiovascular disease and able to counsel patients appropriately on:
 - Diet
 - Cholesterol screening
 - Blood pressure screening
 - Smoking cessation
 - Exercise prescription
 - Stress reduction

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and adherence to ethical principles in the care of patients in all patient encounters on the cardiology rotation.

Objectives

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.



Practice-based Learning and Improvement

Goals:

Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

Systems-based Practice

Goals: To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of cardiac patients.

Objectives:

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions



Infectious Disease PGY – 1

Overall Goals and Objectives:

Goals:

- Develop appropriate interpersonal skills to establish a quality doctor-patient relationship with sensitivity to emotional, physical, cultural and socioeconomic environment.
- Develop a broad-based knowledge of infectious disease, acquiring fundamental skills in evaluating and managing patients in the causes.
- Incorporate evidence-based medicine in the risk-assessment, treatment and management of patients.

Objectives:

- The resident will gain knowledge of common infectious disease problems through one-on-one discussions and precepting with the attending physician and by independent reading.
- Develop an expertise in evaluating patients with primary infections, such as pneumonia and urinary tract infections; secondary infectious processes, such as catheter related infections and ventilator associated pneumonia etc; and immunocompromised patients.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as individual evaluation by the Infectious Disease attendings, so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient/outpatient setting. Assess and manage diseases and disorders commonly encountered in the inpatient/outpatient setting, through an understanding of epidemiology and pathophysiology of ambulatory diseases.

Objectives:

PGY-1

- Ability to take a complete medical history and perform a careful and accurate physical examination.
- Ability to write concise, accurate and informative histories, physical examinations and progress notes.



- Define and prioritize patients' medical problems and generate appropriate differential diagnoses.
- Develop rational, evidence-based management strategies.
- Assessing the appearance of infected and non-infected skin lesions.
- Recognizing physical signs of intravascular infections (e.g., endocarditis).
- Recognizing signs of infected medical devices.
- Distinguishing common rashes associated with infections and with antibiotic allergy
- Interpreting the appearance of respiratory secretions and other potentially infected body fluids.
- Recognizing the psychological context and certain chronic infectious diseases (e.g., AIDS, viral hepatitis) and distinguish psychiatric morbidity from organic consequences of the disease.
- Selecting radiologic diagnostic tools to diagnose infectious conditions and their common complications.
- Management of infectious conditions.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Expand clinically applicable knowledge base of the basic and clinical sciences underlying the care of medical patients.
- Access and critically evaluate current medical information and scientific evidence relevant to patient care.
- Develop and demonstrate proficiency in understanding basic pathophysiology, clinical manifestations, diagnosis and management of medical illnesses seen in both outpatient and inpatient setting.
- Understand pharmacology of antibiotics and classifications of bacteria.
- Basic principles of antibiotic prescribing
- Virulence factors of clinically significant organisms
- Knowledge of epidemiology and microbiology of antibiotic-resistant bacteria.
- Recognition of common clinical presentations and cardinal manifestations of infectious diseases.
- Ability to compose a prioritized patient care plan.
- Ability to appropriate select, recommend, and interpret laboratory tests.



Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters on the infectious disease rotation.

Objectives

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of



practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of infectious disease patients.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions



Inpatient Neurology PGY - 1

Overall Goals and Objectives:

Goals:

- Develop appropriate interpersonal skills to establish a quality doctor-patient relationship with sensitivity to emotional, physical, cultural and socioeconomic environment.
- Develop a broad-based knowledge of common inpatient neurological problems and chronic medical conditions to be able to diagnose and treat these problems.
- Incorporate evidence-based medicine in the risk-assessment and treatment of neurological patients.
- Develop comfort with the evaluation, management and exposure to more complex neurological problems.

Objectives:

- The resident will gain knowledge of neurological disease through one-on-one discussions and precepting with the attending physician and also by independent reading.
- Learn appropriate diagnostic workup, including indications for procedures and neuroimaging, management of common neurologic disease, and appropriate indications for referral.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a individual evaluation by the Neurology attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient neurological consulting setting. Assess and manage diseases and disorders commonly encountered in the inpatient setting, through an understanding of epidemiology and pathophysiology of neurological diseases.

Objectives:

PGY-1



- All residents must be able to provide compassionate, culturally-sensitive, and appropriate care for patients to prevent and treat neurologic disease.
- Demonstrate competence in patient care in the bedside evaluation of patients, in oral case presentations, and written communications in the patients' chart.
- Demonstrate clinical skills that include the ability to perform a differential diagnosis, workup and management plan.
- Demonstrate the ability to interpret results of studies in the context of patient care.
- Residents will demonstrate the ability to take a pertinent neurological history and perform a focused physical exam.
- Acquire skills in the acute management of stroke.
- Demonstrate basic neuroanatomical localization and differentiate between stable and unstable symptoms. Residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures, and become competent in their safe and effective use:
 - Lumbar puncture

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Develop a detailed body of knowledge related to neurological disorders seen on the inpatient neurology service.
- Apply knowledge from evidence-based medicine and didactic teaching to patient care.
- Develop an understanding of the basic pathophysiology and approach to the following common neurologic conditions:
 - Altered mental status, delirium and coma
 - Back and neck pain
 - Cognitive impairment and dementia
 - Concussion
 - Dizziness
 - Dystonic reaction
 - Headache
 - Hearing loss
 - Localized pain syndromes
 - Movement disorders



- Neurologic manifestation of HIV
- Numbness and sensory loss
- Seizure
- Sleep disorders
- Syncope
- Tremor
- Weakness and paralysis

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters.

Objectives

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

Practice-based Learning and Improvement

**Goals:**

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:**PGY-1**

- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the hospital setting and compare this to current practice.

Systems-based Practice**Goals:**

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of inpatient neurologic patients.

Objectives:**PGY-1**

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions



Pulmonology PGY-1

Overall Goals and Objectives:

Goals:

- The Pulmonology rotation will provide the resident with an opportunity to evaluate and manage patients with life-threatening conditions, often affecting multiple organ systems
- Familiarize residents with basic mechanisms of disease, clinical manifestations, and evidence-based guidelines for care.
- Depth of exposure should be such that residents can develop competence in the maintenance of pulmonary health, identification of both common and rare diseases, indications for procedures, interpretation of commonly ordered tests, management of acute flares of disease, and appropriate indications for referral

Objectives:

- The Pulmonary Medicine rotation will provide the resident with an opportunity to manage a number of common pulmonary symptoms and diseases, be exposed to more rare pulmonary conditions, and identify pulmonary manifestations of systemic disease.
- This rotation involves some inpatient consultation as well as an emphasis on the diagnosis, evaluation, and management of chronic disease.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the Pulmonology attendings so that progress and incorporation of feedback over the course of the rotation can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health.

Objectives:

PGY-1

- All residents must be able to provide compassionate, culturally sensitive, and appropriate care for patients to prevent and treat pulmonary disease.



- Residents will demonstrate the ability to take a pertinent history and perform a focused physical exam.
- R1s should be able to differentiate between stable and unstable patients and elicit the following historical details:
 - risk factors that predispose patients to particular infections, such as occupational or environmental exposures, recent contacts, pets, travel, vaccination history, and tobacco and alcohol use
 - sleep symptoms
 - history of respiratory symptoms and vocal changes
 - medication use
- Residents should be able to characterize the following physical findings:
 - R1s: abnormal lung sounds, dullness to percussion, thoracic cage abnormalities, prolonged expiration and pursed lip breathing, accessory muscle use and paradoxical respiration, lymphadenopathy
- Residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures, and become competent in their safe and effective use:
 - R1s: thoracentesis, peak flow meter, bedside spirometry and pulmonary function testing

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-1

- Develop an understanding of the basic pathophysiology and approach to evaluation and treatment of the following presenting conditions commonly associated with pulmonary disease:
 - Chest pain
 - Cough
 - Dyspnea
 - Fever with pulmonary symptoms
 - Hemoptysis
 - History of positive PPD or Tuberculosis exposure
 - Hoarseness
 - Pleural effusion
 - Pulmonary nodule
 - Pulmonary preoperative evaluation



- Snoring or excessive daytime somnolence
 - Stridor
 - Wheezing
- Develop an understanding of the pathophysiology, clinical presentation, and therapy for the following pulmonary diseases:
 - Asthma
 - Atelectasis
 - Bronchitis
 - COPD
 - Cor pulmonale
 - HIV-related lung disease
 - Lung cancer
 - Pneumonia – aspiration, community-acquired, hospital-associated
 - Pneumothorax
 - Pulmonary contusion/rib fracture
 - Pulmonary embolism and infarction
 - Sleep apnea and obesity hypoventilation syndrome
 - Tuberculosis
- Understand the indications for ordering and the interpretation of the following laboratory values and procedures:
 - Analysis of pleural fluids
 - Arterial blood gas
 - Chest imaging with radiograph, CT, CT angiography, MRI, and ultrasound
 - Methacholine challenge
 - NT-pro-BNP
 - Overnight oximetry
 - Polysomnography
 - PPD
 - Procalcitonin
 - Pulmonary angiography
 - Sputum gram stain, culture, and cytology
 - Sweat chloride test
 - Tagged WBC scan and gallium scan
 - Urine Legionella antigen
 - Ventilation Perfusion Scan
- Residents should be able to counsel patients appropriately on the following issues pertinent to maintaining pulmonary health:
 - Immunizations
 - Need for oxygen therapy
 - Pulmonary rehabilitation
 - Smoking cessation



- Isolation with infectious pulmonary disease. Residents should become familiar with diagnoses requiring Public Health notification.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-1

- Document appropriate notes for initial and follow-up outpatient visits
- Apply empathy in all patient encounters
- Demonstrate effective skills of listening and speaking with patients, families and other members of the health care team.
- Present patient information concisely and clearly, verbally and in writing.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters.

Objectives

PGY-1

- Develop skills that encourage ongoing personal and professional growth.
- Demonstrate an understanding of and responsiveness to patient differences related to gender, age, culture, religion, sexual preference, socioeconomic status, beliefs, behaviors, and disabilities.
- Be prompt and prepared for all clinical duties.
- Demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles including compassion, integrity and respect for others, and respect for patient privacy and autonomy.
- Respect patients and their families, staff and colleagues.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant



self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-1

- All residents should be able to access current national guidelines (e.g. www.goldcopd.com for COPD) to apply evidence-based strategies to patient care.
- Demonstrate ability to identify strengths and weaknesses in knowledge base and recognize personal limitations and errors.
- Effectively utilize medical databases to identify original research articles.
- Identify basic types of studies and statistical analysis in the medical literature with assistance.
- Attend, participate and contribute to journal clubs and conferences on a regular basis.
- Analyze and appraise available literature in the context of the care of patients in the outpatient setting and compare this to current practice.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

Objectives:

PGY-1

- Function effectively as a member of an interdisciplinary health care team
- Understand services available for patients outside of direct office-based care
- Begin to understand risk benefit analysis of diagnostic and treatment decisions and how it affects quality of care.
- Understand the limitations and resources of the health care system and impacts on patient management decisions



Gastroenterology PGY – 2

Overall Goals and Objectives:

Goals:

- Familiarize them with basic pathophysiology, clinical manifestations, diagnostic strategies and management of gastroenterological diseases as well as disease prevalence and prevention.
- Depth of exposure should be such that they can develop competency in the prevention of disease, indications for procedures, management of common disease, complications and appropriate indications for referral.

Objectives:

- The resident will have the opportunity to evaluate and manage patients across a spectrum of gastroenterology disorders in both the inpatient and outpatient venues.
- Provide the resident with exposure to a broad range of gastrointestinal conditions, and disorders.
- Provide residents with an understanding of gastrointestinal physiology and its broad systemic manifestations.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as individual evaluation by the Gastroenterology attendings, so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective care for patients to prevent and treat gastroenterology diseases. The resident is expected to demonstrate progressive improvement in basic skills and obtaining thorough and accurate histories, in addition to ordering and interpreting appropriate diagnostic tests and consultations.

Objectives:

PGY-2

- Gather essential, accurate information in interviews and physical exams, and review other data in order to provide the basis for an informative and helpful consultation.



- Write an informative and helpful consultation note
- Prioritize patient problems in order to focus on the question asked by the referring physician.
- Prioritize the workday to assure that emergency problems are taken care of appropriately
- Present cases to the attending faculty in an orderly coherent manner demonstrating thoughtful decision-making and formulating a consulting recommendation
- Monitor and follow up on patients appropriately
- Know indications, contraindications, & some risks of some invasive procedures
- Observe and perform gastrointestinal procedures under the supervision of the GI faculty attending.
- Provide services aimed at prevention and maintenance of health
- Understand and weigh alternatives for diagnosis and treatment
- Recommend and supervise diagnostic procedures and therapies appropriately
- Elicit subtle finding on physical examination
- Supervise medical students on the service
- Develop more comprehensive management plans and commit to a recommendation prior to presenting cases to the attending faculty
- Understand patients' ideas and opinions regarding recommendations, particularly recommendations to perform an invasive procedure
- Spend time appropriate to the complexity of the problem
- Participate in colonoscopies where appropriate.

Medical Knowledge

Goals:

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge of patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of the life-long learning.

Objectives:

- Residents will be able to recognize, appropriately triage, and develop treatment plan for the following:
 - GI Bleeding
 - GI Neoplasms
 - Liver Disorders
 - Pancreatic and Biliary Diseases
 - Abdominal Pain
 - Diarrhea and constipation



- Inflammatory Bowel Disease
- Hepatitis (Viral and autoimmune)
- Cirrhosis and Alcoholic Liver Diseases
- Develop an understanding of the pathophysiology, clinical presentation, and targeted therapy for the following gastrointestinal diseases:
 - Achalasia
 - Autoimmune diseases
 - Barrett's esophagus, esophagitis and chronic GERD
 - C. Difficile colitis
 - Celiac Disease
 - Chronic liver diseases and associated complications
 - Colonic polyps
 - Diverticular disease
 - Gallstones and calcified gallbladder
 - Gastroparesis
 - GI cancers and hereditary cancer syndromes
 - GI manifestation of AIDS
 - Ileus and obstruction
 - Inflammatory Bowel Disease
 - Irritable Bowl Syndrom
 - Peptic Ulcer Disease
 - Steatohepatitis
 - Volvulus
- Know the evidence basis for decisions made in providing consultation
- Know the evidence regarding risk/benefit ratio of the standard GI procedures
- Know and be able to interpret the tests used in common gastroenterological diseases
- Recognize indications, contraindications and risks of commonly used medications and procedures in gastroenterology
- Demonstrate and apply knowledge of epidemiologic and social-behavioral sciences to the care of the patient
- Demonstrate an investigatory and analytic approach to clinical situations.
- Demonstrate the knowledge of the indications for ordering and the interpretation of:
 - 24 hour esophageal pH monitoring
 - B12 and Schilling tests
 - Bleeding scan
 - Breath tests
 - Capsule endoscopy
 - Esophageal manometry
 - Fecal electrolytes, fecal fat and fecal osmolality
 - Gastric emptying study
 - Gastrin level and secretin stimulation test
 - HIDA scan



- IgG4
- Laxative screen

Interpersonal and Communication Skills

Goals:

To communicate in a sensitive and empathetic way that leads to effective information exchange of a care plan to patients, their families, and professional associates.

Objectives

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

Professionalism

Goals:

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in all settings of the gastroenterology rotation.

Objectives

- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

Practice-based Learning and Improvement

Goals:



Residents must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies related to gastroenterology patients.

Objectives:

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

Systems-based Practice

Goals:

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care in the care of gastroenterology patients.

Objectives:

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.



Geriatric Rotation PGY – 2

Overall Goals and Objectives:

Goals:

Quality care of geriatric patients requires a knowledge base and skillset which are acquired throughout residency training. The following goals refer to both residency and rotation geriatrics experience:

- To expose residents to a varied population of older adults in settings ranging from acute to post-acute care including skilled nursing, palliative, hospice, long stay maintenance, and home care.
- To acquire skills needed to care for older patients in a variety of settings.
- To develop a working knowledge of issues involved in caring for the elderly frail population.

Objectives:

- The resident will gain knowledge of common geriatric problems through one-on-one discussions and precepting with the attending physician and also by independent reading.
- The residents are expected to manage and coordinate care and care transitions across multiple delivery systems, including ambulatory, subacute, acute, rehabilitation and skilled nursing.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the geriatric attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the ambulatory, subacute, acute, rehabilitation and skilled nursing setting. Assess and manage diseases and disorders commonly encountered in the outpatient setting, through an understanding of epidemiology and pathophysiology of geriatric diseases.

Objectives:

- Give oral and written presentation to attending physicians in an organized, concise and accurate manner, including differential diagnosis and management plan.



- Demonstrate principle of patient autonomy, confidentiality, and informed consent.
- Develop and demonstrate the ability to work in an efficient, organized manner in assessing and triaging patients according to urgency.
- Use laboratory tests appropriately in delivering patient care.
- Providing comprehensive geriatric healthcare in the hospital, skilled nursing facility, ambulatory clinic and patient's home, including developing skills in assessing patient safety and level of function in the home.
- Learn techniques to incorporate both family commitment and community services in helping to maintain the autonomy of the elderly patient.
- Improve skills of medication prescribing for the elderly, recognizing and avoiding polypharmacy, avoiding side effects and controlling costs.
- To complete comprehensive evaluations of new patients, formulate a differential diagnosis, and develop a plan of care with a focus on preserving and improving functional status.
- To practice appropriate consultation technique including clarifying and consulting physician's questions, evaluating the patient, reviewing pertinent records and providing concise feedback to the consulting physician.
- Work with the patient, caregiver, and utilize the interdisciplinary team appropriately.
- To appropriately demonstrate use of other clinicians into the assessment phase of care.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- To identify physiologic changes associated with aging versus those associated with disease..
- Discuss and evaluation and management of the following common geriatric syndromes and diseases commonly associated with aging including but not limited to the following:
 - Elder abuse
 - Alcoholism
 - Depression
 - Dementia
 - Drug-induced illnesses
 - Common geriatric GI disorders
 - Acute confusion
 - Sepsis
 - Gait disorders and Parkinsonism
 - Malnutrition



- Incontinence
- Atrial fibrillation
- Skin disorders, including cancer
- Terminal diseases and end-of-life care
- Pneumonia
- Hypotension
- Pressure sores
- Degenerative joint disease
- Urinary tract infections
- Sensory loss
- Falls: Risk assessment and prevention
- To know and understand the contributions of geriatricians, physician extenders, nurses, psychologists, psychiatrists, social workers, rehab therapists, and pharmacists in non-acute setting.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters on the geriatric rotation.

Objectives:



- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

- Construct focused clinical questions.
- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of geriatric patients.

Objectives:

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.



- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

Rheumatology Rotation PGY – 2

Overall Goals and Objectives:

Goals:

- Develop knowledge and experience in the evaluation and management of patients with rheumatic disorders.
- Learn procedural skills and clinical competence in rheumatic disease(s).
- Incorporate evidence-based medicine in the risk-assessment, treatment, and long-term management of patients.

Objectives:

- The resident will gain knowledge of common rheumatic disease(s) in an ambulatory setting through one-on-one discussions and precepting with the attending physician and by independent reading.
- The resident will have the opportunity to evaluate, diagnose and manage patients with a broad range of disorders that involve the musculoskeletal system that often have immunologic basis in a clinic setting.
- Provide residents with an understanding of rheumatic physiology and its broad systemic manifestations.
- Residents are evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the Rheumatology attendings so that progress and incorporation of feedback over the course of the rotation can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Competency-Based Goals



Patient Care

Goals:

To provide compassionate, appropriate, and effective care for all patients to which they are assigned.

Objectives:

- All residents must be able to provide compassionate, culturally sensitive, and appropriate care for patients with rheumatologic disease.
 - Seek directed and appropriate specialty or surgical consultation when necessary to further patient care.
- Residents will demonstrate the ability to take pertinent history and perform a complete physical exam, the emphasis on the musculoskeletal exam. PGY-2 should be able to elicit the timing, intensity, and impact on functional status of a patient's symptoms. PGY-2 should be able to obtain the following historical details:
 - Anorexia fugax
 - Family or personal history of autoimmune disease
 - History of hypercoagulability
 - Jaw claudication
 - Joint, muscular, and neuropathic symptoms
 - Mucocutaneous abnormalities: hair loss, photosensitivity, rash, ulcers
 - Reynaud's phenomenon
 - Sicca complex
 - Systemic symptoms, such as fatigue, fever, poor sleep, sweats, or weight loss.
- Differentiate inflammatory from mechanical joint pain and recognize the contribution of comorbidities and medication compliance to a patient's symptoms.
- Residents should be able to characterize the following physical findings:
 - Alopecia
 - Clubbing
 - Digital and mucocutaneous ulcers
 - Dupuytren's contracture
 - Foot drop
 - Joint abnormalities, including Bouchard and Heberden's nodes, crepitus, instability, effusion, range of motion, subluxation, and ulnar deviation.
 - Kyphosis
 - Muscle atrophy
 - Nail pitting
 - Palpable purpura
 - Rashes: discoid, heliotrope, malar, psoriasis
 - Scleroderma skin changes
 - Splinter hemorrhages
 - Tophi



- Periungual erythema/abnormal nailfold capillaries
 - Gottron's papules
- Residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures, and become competent in their safe and effective use:
 - Knee arthrocentesis and injection, nailfold capillary microscopy, bursal injection
 - Other joint arthrocentesis and injection(optional) soft tissue injection

Medical Knowledge

Goals:

Residents must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- Explore the basic pathophysiology, clinical presentation, and treatment of more common conditions, such as Baker's cyst, bursitis, carpal tunnel syndrome, fibromyalgia, gout, osteoarthritis, rheumatoid arthritis, rotator cuff tear, scoliosis, systemic lupus erythematosus, and tendonitis.
- The resident will develop a more complete understanding of the pathophysiology, clinical presentation, and therapy for the following conditions:
 - Adhesive capsulitis
 - Antiphospholipid Antibody Syndrome
 - Behcet's Disease
 - Greater trochanteric pain syndrome
 - Meralgia paresthetica
 - Myofascial strain
 - Paget's Disease
 - Polymyalgia Rheumatic
 - Pseudogout
 - Radiculopathy
 - Reflex Sympathetic Dystrophy
 - Sacroiliac dysfunction
 - Scleroderma
 - Septic arthritis and bursitis
 - Sjogren's Syndrome
 - Spinal Stenosis
 - Spondyloarthropathies
 - Sweet's Syndrome
 - Vasculitis



- All residents will become familiar the following issues related to therapy for connective tissue disease:
 - Selection of initial therapy
 - Risks and benefits of biologic therapy
 - Clinical and laboratory monitoring of response to therapy
 - Special considerations for patients on chronic steroid therapy
 - Treatment related complications
- The residents will be able to understand the indications for ordering and the interpretation of the following laboratory values and procedures:
 - Analysis of synovial fluids
 - Autoantibodies – ANA, ANCA, anti-cardiolipin, anti-CCP, anti-dsDNA, anti-ENA, anti-jo-1, anti-MPO, anti-phospholipid, anti-PR3, anti-SEL-70, anti-SM, rheumatoid factor.
 - CBC with peripheral smear
 - Chemistries
 - Complements
 - Cryoglobulins
 - Imaging with plain films and MRI
 - Immunoglobulins
 - Muscle enzymes
 - Sedimentation rate and c-reactive protein
 - Uric acid
 - Urinalysis with microscopy
- Demonstrate knowledge of the effect of inflammation on other laboratory values (acute phase response), the overlap of lab findings in synovial fluid inflammation and/or infection, and the indications, for ordering and/or the interpretation of:
 - Arthroscopy
 - EMG/NCV
 - Muscle, salivary gland, or sural nerve biopsy
- Residents should become fluent in the social issues relevant to patients with rheumatologic disease, such as the assessment of functional limitation at home and at work, and the need for support groups.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives



- Develop interpersonal skills that facilitate collaboration with patients, their families, and other health professionals.
- Reliably and accurately communicate the patient's and his/her family's views and concerns to the attending.
- Demonstrate organized and articulate electronic and verbal communication skills that build rapport with patients and families, convey information to other health care professionals, and provide timely documentation in the chart.
- Teach colleagues effectively.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the outpatient rheumatology clinic.

Objectives

- Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the outpatient rheumatology clinic.
- Demonstrate the ability to counsel patients and families both on diagnostic and treatment decisions and on withdrawal of care.
- Model ethical behavior by reporting back to the attending and referring providers any key clinical findings.
- Demonstrate integrity
- Respond to phone calls and pages promptly
- Use time efficiently in the clinic to see patients and document information.
- Provide constructive criticism and feedback to more junior members of the team.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

- Construct focused clinical questions.



- Develop skills in evaluating new studies in published literature, through journal club and independent study
- Effectively search evidence-based summary medical information resources.
- Demonstrate ability to receive, respond appropriately to, and incorporate feedback into one's daily practice.
- Act as an organizational problem solver for patients.
- Understand and explain whether current practice is in line with available literature and suggest changes in practice that will improve patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of rheumatology patients.

Objectives:

- Demonstrate an awareness of alternative therapies and their costs, risks, and benefits.
- Identify quality issues in primary care, such as recent recommendations regarding diagnostic testing within the context of providing high quality, high value care for patients.
- Determine cost-effectiveness of alternative proposed interventions.
- Demonstrate awareness of the impact of diagnostic and therapeutic recommendations on the health care system, cost of the procedure, insurance coverage, and resources utilized.

Endocrinology Rotation PGY – 3

Overall Goals and Objectives:

Goals:

- Develop knowledge, experience and competency in disease prevention, management of common diseases, and appropriate indications for endocrinology patients.
- Develop a broad-based knowledge of basic pathophysiology, clinical manifestations, diagnostic strategies and treatment in endocrinology patients.
- Incorporate evidence-based medicine in the risk-assessment, treatment and long-term management of patients.

Objectives:



- Residents will be involved in the evaluation and management of disorders of the body's glands, hormonal secretions, and changes in body metabolic activity.
- The resident will be able to diagnose and treat conditions commonly seen in outpatient endocrine care, such as diabetes, hyperlipidemia, menopausal symptoms, osteoporosis, thyroid disease and obesity
- The resident will gain knowledge of common endocrine problems through one-on-one discussions and precepting with the attending physician and by independent reading.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the Endocrinology attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals: To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the outpatient setting. Assess and manage diseases and disorders commonly encountered in the outpatient setting, through an understanding of epidemiology and pathophysiology of endocrine disease(s).

Objectives:

- The resident is expected to demonstrate progressive improvement in the following basic skills:
 - Physical examination skills necessary for detection of common findings
 - Thyroid nodules
 - Thyromegaly
 - Diabetic retinopathy
 - Diabetic food complications
 - Diabetic neuropathy
 - Manifestations of glucocorticoid excess
 - History taking, medical decision-making, and clinical judgement necessary for development of diagnostic and management plans for common endocrinologic conditions
 - Appropriate ordering and interpretation of common radiologic diagnostic procedures including the following:
 - bone mineral density
 - thyroid radionuclide
 - ultrasound studies



- hypothalamic/pituitary MRI
- By the end of the PGY-3 residents are expected to:
 - Perform an endocrinologic history, physical examination and assessment
 - Formulate a management plan
 - Clearly document patient management in the medical record
 - Make informed decisions on diagnostic and therapeutic interventions
 - Counseling and education patients and their families

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- Residents will be able to develop an understanding of the pathophysiology, clinical presentation, and therapy for the following endocrine conditions:
 -
 - Acromegaly
 - Congenital adrenal hyperplasia
 - Cushing's syndrome
 - Diabetes insipidus
 - Diabetes mellitus- types I and II
 - Hypoglycemic syndromes
 - Hyperaldosteronism
 - Hypogonadism
 - Thyroid disorders
 - Hypothalamic and pituitary disease
 - Hypercalcemia, metabolic bone disease, and vitamin D metabolic disorders
 - Endocrine hypertension
 - Adrenal disorders
 - Lipid metabolism
 - Nutrition and obesity
 - Male reproductive disorders, including hypogonadism and impotence
 - Female reproductive disorders, including amenorrhea and infertility
 - Hormone-producing neoplasms
 - Insulinoma
 - Osteomalacia
 - Osteoporosis
 - Paget's Disease
 - Panhypopituitarism



- Parathyroid and thyroid dysfunction
 - Pheochromocytoma
 - Polycystic ovarian disease
 - Thyroid cancer
 - SIADH
- By the end of the rotation residents are expected to:
 - Recognize endocrine symptoms and signs of variety conditions
 - Use medications appropriately
 - Manage common endocrine syndromes
 - Formulate differential diagnosis for common endocrine diseases.
- Develop an understanding of pathophysiology, clinical presentation, and therapy for the above conditions, with attention to differences in patient populations where appropriate
- Be familiar with other hormone producing neoplasms (carcinoid, MEN, gastrinoma, small cell cancer) and paraneoplastic syndromes.
- Recognize the association of other diseases with endocrine disease, such as Celiac Disease and Diabetes mellitus I.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in the endocrinology clinic.

Objectives:



PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of endocrinology patients.

Objectives:



- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

Hematology/Oncology PGY – 3

Overall Goals and Objectives:

Goals:

- Familiarize residents with the basic mechanisms, clinical manifestations, diagnostic strategies and management of cardiovascular disease as well as disease prevalence and prevention.
- Depth of exposure should be such that they can develop competency in the prevention of cardiovascular disease, indications for procedures management of common disease, management of the acutely ill patient and appropriate indications for referral.

Objectives:

- The resident will have the opportunity to evaluate and manage patients across a spectrum of cardiovascular disorders in both the inpatient and outpatient venues.
- Provide residents with an understanding of cardiovascular physiology and its broad systemic manifestations.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the Hematology/Oncology attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient and outpatient setting. Assess and manage diseases and disorders commonly encountered in the outpatient setting, through an understanding of epidemiology and pathophysiology of hematologic and oncologic diseases.

**Objectives:**

- All residents must be able to provide compassionate, culturally-sensitive, and appropriate care for patients to prevent and treat hematologic and oncologic diseases.
 - PGY-3 should supervise and ensure seamless transitions of care between primary and consulting teams and between inpatient and outpatient care.
- Residents will demonstrate the ability to take a pertinent history and perform a focused physical exam. PGY-1 should be able to differentiate between stable and unstable patients and elicit and following historical details:
 - Systemic symptoms (e.g. fatigue, fever, poor sleep, sweats, or weight loss)
 - History of bleeding or clotting
 - Personal and family history of cancer or hematologic disease
 - History of alcohol, tobacco and drug use; environmental/occupational exposures, genetic predisposition, sexual behaviors, and other risk factors that predispose patients to develop disease
 - Complete medication history, including supplements and alternative medications
 - PGY-3 should be able to independently obtain the above details for patients with a history of complex hematologic or oncologic disease and multiple comorbid conditions.
- Residents should be able to appreciate the following physical findings with increasing confidence and independence: abdominal mass, ascites, breast mass, clubbing, jaundice, lymphadenopathy, organomegaly, petechiae, pleural effusion, prostate nodule, rectal mass, scleral icterus, skin lesion, and thyroid nodule.
- Residents will understand the indications, contraindications, complications, limitations, and interpretation of following procedures, and become competent in the safe and effective use:
 - PGY-3 will independently order and interpret laboratory and diagnostic tests appropriate to the condition of the patient.

Medical Knowledge**Goals:**

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- Develop an understanding of the basic pathophysiology of and initial approach to the following signs and symptoms, which often signal underlying hematologic or oncologic disease:
 - Abdominal pain or distention
 - Anemia



- Ascites
- Bleeding – hemoptysis, GI, gums, or vaginal
- Bone pain
- Bowel Obstruction
- Bruising or petechiae
- Change in bowel habits
- Family history of bleeding or cancer
- Fatigue or generalized weakness
- Fever of unknown origin
- Jaundice
- Pallor
- Pancytopenia
- Pathologic fracture
- Pleural effusion of unknown etiology
- Persistent cough or hoarseness
- Recurrent infections
- Sensory polyneuropathy of unclear etiology
- Soft tissue mass or lymphadenopathy
- Splenomegaly
- Thrombosis, arterial or venous
- Unintentional weight loss
- Develop an understanding of the pathophysiology, clinical presentation, and targeted therapy for the following hematologic and oncologic conditions:
 - AIDS-related malignancies
 - Amyloidosis
 - Anemia- chronic disease, hemolytic, iron deficiency, macrocytic, sideroblastic
 - Chronic leukemia
 - Common coagulation disorders
 - Common solid tumors (sarcomas, carcinomas, lymphomas)
 - Drug toxicity, including cardiomyopathy and SVT, extravasation, malignant hyperpyrexia, nausea/vomiting/dehydration, neuromyopathy
 - Hemochromatosis
 - Hereditary cancer syndromes
 - Hypercalcemia
 - Metastatic disease, unknown primary
 - Multiple myeloma
 - Myelodysplastic syndromes
 - Myeloproliferative disorders
 - Paraneoplastic syndromes
 - Skin cancers
 - SIADH
 - Thalassemia



- Thrombotic disorders
- Residents will develop an understanding of:
 - Pathophysiology, clinical presentation, and targeted therapy for the above conditions, with attention to differences in patient populations where appropriate.
 - The impact of functional status and tumor pathology on disease
 - Hospice, Palliative care, transplant options and post-transplant care.
- Residents will be able to recognize, appropriately triage, and treat hematologic and oncologic emergencies with increasing levels of independence, including:
 - Acute leukemia/blast crisis
 - Cord compression
 - Febrile neutropenia
 - Fulminant DIC
 - Intracranial metastasis with edema
 - Seizure
 - Severe hypercalcemia or hyponatremia
 - Severe thrombocytopenia
 - Superior vena cava syndrome
 - Thrombotic thrombocytopenic purpura
 - Tumor lysis syndrome
 - Uncontrolled pain
- Resident will gain an understanding with the principles of cancer biology and therapy, including:
 - The general role of oncogenes and tumor suppressor genes in cancer development
 - Scoring systems for calculating functional status and impact on therapy decisions
 - Principles of treatment with surgery, radiation, chemotherapy, and immunotherapy
 - Commonly used drugs, drug interactions, and side effects
 - Supportive care for disease – or treatment-related complication, including cognitive dysfunction, infertility, lymphedema, premature menopause, psychosocial issues, surgical reconstruction, and survivorship issues.
- PGY-3 will gain a better understanding of the above conditions and principles of treatment within the setting of comorbidities.
- Residents will understand common principles involved in management of the hemostatic and clotting system, including:
 - Premedication for blood products
 - Transfusion of blood products and factors
 - Ordering and managing anticoagulation
 - Risks and benefits of antiplatelet agents
- Understand the indications for ordering and the interpretation of the following laboratory values and diagnostic studies:
 - CBCD with indices and peripheral smear
 - Chemistries
 - Cytology and pathology



- Free light chain ratio, SPEP, SIEP, UPEP, and UIEP
- Hemoglobin electrophoresis
- B12, folate, homocysteine and methylmalonic acid
- Imaging studies, including plain radiographs, CT, mammogram, MRI, and US
- Iron studies
- PSA
- Reticulocyte count
- Serologic tumor markers
- Stool guaiac
- PGY-3 will independently, appropriate order the above studies and be able to interpret results within the context of patient comorbidities, pretest probability of disease, and patient values. PGY-3 will also demonstrate knowledge of the indications, contraindications, and appropriate timing for the following procedures:
 - Bone marrow cytogenetics, immunophenotyping, and special stains
 - Chromosome analysis – bone marrow and peripheral blood
 - Estrogen and progesterone receptors
 - Lymph node biopsy and lymphoid cell immunophenotype
 - PET scan
- PGY-3 should be familiar with alternative and complementary therapies commonly used by patients.

Interpersonal and Communication Skills

Goals:

To communicate in a sensitive and empathetic way that leads to effective information exchange of a critical care plan to patients, their families, and professional associates.

Objectives

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.
- PGY-3 should demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- PGY-3 must be able to elicit information or agreement in situations with complex social dynamics, for example, identifying the power of attorney or surrogate decision maker, dealing with a “difficult” patient, and resolving conflict among family members with disparate wishes.



Professionalism

Goals:

Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients on the Hematology/Oncology service.

Objectives

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).
- PGY-3 should be able to provide constructive criticism and feedback to more junior members of the team.

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

- All residents should be able to access current national guidelines to apply evidence-based strategies to patient care (e.g. National Comprehensive Cancer Network Clinical Practice Guidelines <http://nccn.org/>)
- All residents should participate in case-based therapeutic decision-making, involving the primary care provider, hematologist-oncologist, radiation oncologist, and surgeon, with PGY-3 taking a leadership role.
- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.



- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care in the care of critically ill hematological and oncological patients.

Objectives:

- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

Nephrology PGY – 3

Overall Goals and Objectives:

Goals:

- Residents must be able to recognize, evaluate and initiate treatment for common renal disorders as well as understand the relationship between systemic processes and the kidney.
- Gain experience caring for a broad spectrum of patients who present with varied disease states, different socioeconomic backgrounds, and diverse needs for medical care.
- Incorporate evidence-based medicine in the risk-assessment, treatment and long-term management of patients.

Objectives:

- The residents will learn how to function as a consultant to referring physicians for patients who require assistance with nephrology problems or require emergency hemodialysis.
- The resident must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.



- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a group evaluation by the nephrology attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient and outpatient setting. Assess and manage diseases and disorders commonly encountered in the inpatient and outpatient setting, through an understanding of epidemiology and pathophysiology of nephrology diseases.

Objectives:

PGY-3

- Develop the ability to obtain and document an appropriate history and physical, interpret test results related to the renal system and develop appropriate treatment plans for the following:
 - Skills and Procedures (i.e. urinalysis)
 - Indications for renal biopsy and basic interpretation of results
 - Basic interpretation of IVP's, renal ultrasounds, and CT scans of the kidneys
 - Administration of IV fluids in a rational manner
 - Management of electrolyte problems
 - By the end of the rotation, PGY-3 residents are expected to:
 - Gather essential, accurate information in interviews and physical exams, and review other data in order to provide the basis for an informative and helpful consultation.
 - Write an informative and helpful consultation note
 - Prioritize patient problems in order to focus on the questions asked by the referring physician
 - Prioritize the workday to assure that emergency problems are taken care of appropriately
 - Present cases to the attending faculty in an orderly coherent manner demonstrating thoughtful decision-making and formulating a consulting recommendation.
 - Monitor and follow-up on patients appropriately
 - Know indications, contraindications, and some risks of some invasive procedures
- Provide services aimed at prevention and maintenance of health.

Medical Knowledge

**Goals:**

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:**PGY-3**

- Fluid and Electrolyte Metabolism
 - Understanding normal and abnormal fluid and electrolyte metabolism is a prime goal of the nephrology rotations. Major areas of concentration include:
 - Normal Water metabolism
 - Hyponatremia
 - Hypernatremia
 - Normal Salt Metabolism
 - Diuretics and Edema
 - Volume Depletion and Fluids
 - Normal Acid-Base Metabolism
 - Metabolic Acidosis
 - Metabolic Alkalosis
 - Renal Response to Respiratory Acid-Base Disturbances
 - Potassium metabolism
 - Hyperkalemia
 - Hypokalemia
 - Calcium, Phosphorus, and Magnesium Metabolism
- A thorough understanding of the pathophysiology, diagnosis and treatment of renal diseases is a second goal of the nephrology rotation. Topics to be covered include:
 - Glomerular Disease and the Nephrotic Syndrome
 - Nephrolithiasis
 - Acute Renal Failure
 - Developmental and Familial Renal Disease
 - Interstitial Nephritis
 - Diabetic Nephropathy
 - Hypertension – Primary and Secondary
- The care and management of patients with chronic renal failure and end-stage renal disease is a third goal of the nephrology resident rotation. Areas of focus include:
 - Primary care of the ESRD patient
 - Methods of treatment for ESRD
 - Drug use in chronic renal failure and ESRD
 - Derangements in endocrine, cardiac, hematologic and neurologic function in the ESRD patient
 - Infections in ESRD patients



- Long-term management of the renal transplant recipient
- Demonstrate knowledge of basic and clinical sciences
- Demonstrate knowledge of nephrology, particularly concerning acute renal insufficiency and fluid and electrolyte problems
- Know the evidence basis for decisions made in providing consultation
- Know the evidence regarding risk/benefit ratio of renal biopsy and renal imaging studies
- Know and be able to interpret the tests utilizing in common renal disorders.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-3

- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the continuity clinic.

Objectives

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).



Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of nephrology patients.

Objectives:

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.



Day Float PGY – 3

Overall Goals and Objectives:

Goals:

- Residents will gain experience and efficiency in admitting patients throughout the day and expected to read about medical issues of admitted patient in preparation for discussion during sign-outs.
- Develop a broad-based knowledge and experience in managing acutely ill patients spanning the entire domain of Internal Medicine.
- Incorporate evidence-based medicine and develop the clinical skills necessary to diagnose and treat undifferentiated medical patients with a wide range of illnesses.

Objectives:

- The resident will gain knowledge in learning how to diagnose, treat, and manage various medical problems in patients who are admitted to internal medicine service for whom internal medicine consultation services are requested.
- The resident learns to effectively transfer of care of patients, triage of acutely ill patients and guide independent management will be emphasized.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as an evaluation by the attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the ambulatory setting. Assess and manage diseases and disorders commonly encountered in the inpatient setting, through an understanding of epidemiology and pathophysiology of ambulatory diseases.

Objectives:

- Evaluate and prioritize problems and complications occurring in hospitalized patients.
- Efficiently evaluate and stabilize patients newly received from the Emergency Department



- Ability to take a complete medical history and perform a careful and accurate physical examination.
- Ability to write concise, accurate and informative histories, physical examinations and progress notes.
- Ability to formulate comprehensive and accurate problem lists, differential diagnoses and plans of management.
- Ability to make basic interpretations of chest and abdominal x-rays and electrocardiograms.
 - PGY-3 – Develop and demonstrate proficiency in above and ability to perform basic procedures; venipuncture; arterial puncture, placement of central venous lines, lumbar puncture, abdominal paracentesis, thoracentesis, arthrocentesis, and nasogastric intubation.

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

- Learn appropriate management strategies for problems commonly occurring in hospitalized patients, such as: fever, shortness of breath, chest pain, and altered consciousness.
- Develop and demonstrate in-depth knowledge of basic pathophysiology, clinical manifestations, diagnosis and management of medical illnesses, as seen on a general medicine inpatient service.
- Develop and demonstrate in-depth knowledge of indications for the interpretation of chest and abdominal x-rays and electrocardiograms.
- Familiarity with indications for performance and basic interpretations of standard laboratory tests, including blood counts, coagulation studies, blood chemistry.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-3



- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the continuity clinic.

Objectives

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.
- Coordinate patient care as part of the larger team, taking a leadership role.



- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of continuity patients.

Objectives:

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the inpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.

ICU Nights PGY – 3

Overall Goals and Objectives:

Goals:

- Function as a member of a multidisciplinary team caring for critically ill patients.
- Develop a broad-based knowledge, exposure and skills needed for critically ill patients with a wide variety of disease states.
- Incorporate evidence-based medicine and formulate and understand the differential diagnosis, diagnostic approach and treatment plan of specific conditions pertaining to critically ill patients.

Objectives:

- The resident must show progressive ability to acutely manage the critically ill patient and upon graduation, to care for a critically ill patient.



- The resident will be expected to develop teaching skills through the participation of teaching medical students and junior residents.
- The resident must be able to set initial ventilator settings for patients with acute respiratory failure, indications for tracheal intubation and non-invasive ventilation.
- The resident will be evaluated in the 6 core competencies (Medical Knowledge, Patient Care, Interpersonal Communication Skills, Professionalism, Practiced Based Learning and Systems Based Practice). These are done as a individual evaluation by the critical care attendings so that progress and incorporation of feedback over the course of the year can be assessed. An outline of core competencies with rotation objectives, instructional activities, and evaluations is below.

Patient Care

Goals:

To provide compassionate, appropriate, and effective patient care for the treatment of health problems and the promotion of health in the inpatient care setting. Assess and manage diseases and disorders commonly encountered in the inpatient care setting, through an understanding of epidemiology and pathophysiology of critical care diseases.

Objectives:

PGY-3

- Demonstrate competence in the practice of health promotion, disease prevention, diagnosis, care, and treatment of patients of each gender, from adolescence to old age, during health and all stages of illness.
- Gather essential and accurate information to evaluate patients with a variety of critical illnesses.
 - Obtain a comprehensive and accurate history of present illness for a variety of presentations of critical illness.
 - In a comatose patient, demonstrate the resourcefulness to utilize a number of information sources including patient's family, friends and other health care providers.
 - Identify historical facts that suggest an immediate threat to survival and be able to prioritize those needing immediate attention
 - Demonstrate physical examination skills appropriate to the presentation.
- Counsel and educate patients and their families
- Use information technology to support patient care decisions and patient education
- Demonstrate an ability to work with a variety of health care professionals to provide patient-focused care.
- Demonstrate effective communication through the informed consent process for minor procedures.



- Demonstrate competence in the prevention, evaluation and management:
 - Acute lung injury, including radiation, inhalation, and trauma
 - Acute metabolic disturbances, including over dosages and intoxication syndromes
 - Anaphylaxis and acute allergic reactions in the critical care unit
 - Cardiovascular disease in the critical care unit
 - Circulatory failure
 - Detection and prevention of iatrogenic and nosocomial problems in critical care medicine
 - Diffuse interstitial lung disease
 - Disorders of the pleura and the mediastinum
 - End of life issues and palliative care
 - hypertensive emergencies;
 - iatrogenic respiratory diseases, including drug-induced disease;
 - immunosuppressed conditions in the critical care unit;
 - metabolic, nutritional and endocrine effects in critical illness,
 - hematologic and coagulation disorders associated with critical illness;
 - multi-organ system failure;
 - obstructive lung diseases, including asthma, bronchitis, emphysema, and bronchiectasis;
 - occupational and environmental lung diseases;
 - perioperative critically ill patients, including hemodynamic and ventilatory support;
 - psychosocial and emotional effects of critical illness on patients and their families;
 - pulmonary embolism and pulmonary embolic disease;
 - pulmonary manifestations of systemic diseases, including collagen vascular disease and diseases that are primary in other organs;
 - pulmonary vascular disease, including primary and secondary pulmonary hypertension and the vasculitis and pulmonary hemorrhage syndromes;
 - renal disorders in the critical care unit, including electrolyte and acid-base disturbance and acute renal failure;
 - respiratory failure, including the acute respiratory distress syndrome, acute and chronic respiratory failure in obstructive lung diseases, and neuromuscular respiratory drive disorders;
 - sepsis and sepsis syndrome;
 - severe organ dysfunction resulting in critical illness to include disorders of the gastrointestinal, neurologic, endocrine,
 - hematologic, musculoskeletal, and immune systems as well as infections and malignancies;
 - shock syndromes;
 - Sleep-disordered breathing; and, the use of paralytic agents and sedative and analgesic drugs in the critical care unit.



- Demonstrate competence in interpreting data derived from various bedside device commonly employed to monitor patients, and data from laboratory studies related to sputum, bronchopulmonary secretions, pleural fluid
- Demonstrate competence:
 - Airway management
 - The use of a variety of positive pressure ventilatory modes, including:
 - The use of reservoir masks and continuous positive airway pressure masks for delivery of supplemental oxygen, humidifiers, nebulizers, and incentive spirometry
 - Flexible fiber-optic bronchoscopy procedures, including those where endobronchial and transbronchial biopsies, and transbronchial needle aspiration are performed (each fellow must perform a minimum of 100 such procedures)
 - Diagnostic and therapeutic procedures, including paracentesis, lumbar puncture, thoracentesis, endotracheal intubation, and related procedures
 - Use of chest tubes and drainage systems
 - Insertion of arterial, central venous and pulmonary artery balloon flotation catheters
 - Calibration, operation and interpretation of data from bedside hemodynamic monitoring systems
 - Insertion of operation of bedside hemodynamic monitoring systems
 - Emergency cardioversion
 - Interpretation of intracranial pressure monitoring and transcranial Doppler data
 - Nutritional support
 - Use of ultrasound techniques to perform thoracentesis and place intravascular and intracavitary tubes and catheters; and
 - Use of transcutaneous pacemakers
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgement specifically required for the diagnosis and treatment of critical illness

Medical Knowledge

Goals:

Demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge in patient care. Residents must demonstrate the ability to appraise and assimilate the latest clinical evidence as a part of life-long learning.

Objectives:

PGY-3



- Demonstrate an investigatory and analytic thinking approach to clinical situations by applying an evidence-based medicine principles.
- Demonstrate a fundamental knowledge of the care of critical care medicine patients.
- Demonstrate the knowledge of established and evolving biomedical clinical, epidemiological and social behavioral sciences, as well as the application of the knowledge to patient care.
- Demonstrate knowledge of indications, contraindications, limitations, complications, techniques, and interpretation of results of those diagnostic and therapeutic procedures integral to the discipline, including the appropriate indication for the use of screening tests/procedures.
- Demonstrate knowledge of the indications, contraindications and complications of placement of percutaneous tracheostomies.
- Demonstrate knowledge of:
 - Imaging techniques commonly employed in the evaluation of patients with pulmonary disease or critical illness, including the use of ultrasound
 - Pericardiocentesis
 - Percutaneous needle biopsies
 - Renal replacement therapy
 - Pulmonary function tests to assess respiratory mechanics and gas exchange, including spirometry, flow volume studies, lung volumes, diffusing capacity, arterial blood gas analysis, exercise studies, and interpretation of the results of bronchoprovocation testing using methacholine or histamine
 - Pharmacokinetics, pharmacodynamics, and drug metabolism and excretion of critical illness
 - Principles and techniques of administration and management of a MICU
 - Ethical, economic, and legal aspects of critical illness
 - Recognition and management of the critically ill from disasters, including those caused by chemical and biological agents; and
 - The psychosocial and emotional effects of critical illness on patients and their families.

Interpersonal and Communication Skills

Goals:

To demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and professional associates.

Objectives

PGY-3



- Navigate complex discussions on sensitive topics with patients and their families.
- Demonstrate effective communication with patients and clinical staff that result in improved patient care
- Demonstrate leadership skills to build consensus and coordinate a multidisciplinary approach to patient care.
- Counsel patients, families and colleagues regarding side effects and appropriate use of specific medications, providing written documentation when appropriate.

Professionalism

Goals:

To demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles in the care of patients in all patient encounters in the intensive care unit.

Objectives

PGY-3

- Demonstrate commitment to self-directed learning, self-evaluation, and self-improvement
- Adhere to principles of confidentiality, scientific and academic integrity, and informed consent
- Advocate for patient needs in the healthcare system
- Provide leadership for a team that respects patient dignity and autonomy.
- Serve as a professional role model for more junior colleagues (e.g., medical students, interns).

Practice-based Learning and Improvement

Goals:

To demonstrate the ability to investigate and evaluate care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning. Residents are to develop skills and habits to be able to systematically analyze practice using quality improvement methods and implement changes with the goal of practice improvement. Residents should be able to locate, appraise and assimilate evidence from scientific studies.

Objectives:

PGY-3

- Evaluate and improve own practice by reviewing personal performance and clinical outcomes data in comparison to established standards of care.



- Coordinate patient care as part of the larger team, taking a leadership role.
- Identify potential areas of practice that may benefit from a quality assessment review and identify methods to improve the quality of care delivered, working directly with faculty and other available staff and researchers involved in quality improvement.
- Independently appraise clinical guidelines, meta-analyses and original research articles.
- Integrate clinical evidence, clinical context and patient preferences into decision making and patient care.

Systems-based Practice

Goals:

To demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care to a panel of critical care patients.

Objectives:

PGY-3

- Identify cost considerations and patient demographics in treatment plans in the outpatient setting.
- Design cost-effective plans based on knowledge of best practices.
- Provide optimal care to patients by effectively using all applicable resources available in the health care system.