



Educational Goals and Objectives for Rotations on:

Pulmonary

Educational General Goals:

IM Residents will train predominately in the Pulmonary office setting with an occasional consult in the hospital setting. Overall residents will

- Learn to recognize and to treat the major clinical syndromes and diseases encountered in pulmonary medicine.
- Learn the appropriate use, interpretation, and troubleshooting of invasive monitoring equipment used in the ICU.
- Learn the appropriate indication for intubation and use of mechanical and non-mechanical ventilatory support.
- Develop effective consulting skills, and learn when to appropriately refer to pulmonary.
- Learn to interpret pulmonary function testing, chest x-rays, and CT examinations of the thorax.
- Learn the appropriate indications for bronchoscopy and other invasive procedures.
- Develop skills in common diagnostic and therapeutic procedures such as thoracentesis and chest tube placement.
- This chart details the minimum curricular goals for each year of residency.

Patient Care: History Taking

PGY-1 Demonstrates the ability to obtain and document a comprehensive history from patient and/or caretaker.

- Specific focus on pulmonary issues:
 - Respiratory symptoms
 - Exercise tolerance
 - Tobacco history
 - Previous dx testing
 - Sleep symptoms
 - Genetic, epidemiologic, and disease-related risk factors for lung disease.
 - Achieves these objectives with moderate faculty input.
- PGY-2 Comprehensive history obtained with occasional input from faculty.
- PGY-3 Independently obtains comprehensive history.
- Evaluation Methods:
 - Mini Cex
 - End of Rotation Competency Tool





Patient Care: Physical Exam

PGY-1 Performs accurate and complete physical examination. Emphasis on detailed pulmonary exam.

- With moderate faculty input, can describe and document abnormalities in physical examination.
- Can describe and begins to be reliable in the following exams:
 - Wheezing
 - Crackles
 - Egophony
 - Bronchophony
 - Pleural friction rub

PGY-2 Achieves objectives with only occasional input from faculty.

- Understands the rational clinical examination of the chest, value of examination in diagnosis of pneumonia and CHF.
- Can distinguish between a pleural and pulmonary friction rub.
- Teaches about the important aspects of the physical examination.

PGY-3 Accurately describes and documents the objectives with rare faculty input.

- Teaches about the important aspects of the examination with EBM-supporting data.
- Evaluation Methods: Mini Cex, End of Rotation Competency Tool

Patient Care Medical Decisions

PGY-1 Works with multi-disciplinary team of Nursing, RT, PT in ICU care and ventilatory management.

- Reliably recognizes clinical decompensation and appropriately seeks assistance.
- Describes management and target therapeutic goals for a variety of pulmonary conditions (see medical knowledge list).
- Writes consult and progress notes that identify important data and demonstrate thoughtful problem-based assessment and plan.
- These objectives are met with regular faculty input.

PGY-2 In-depth understanding of contributions of multidisciplinary team.

- Reliably recognizes critical illness.
- Accurately interprets examination and study findings.
- Can independently initiate management strategies.
- These objectives are met with occasional faculty input.

PGY-3 Can independently initiate emergent and ongoing management strategies.

Can identify causes of failure to respond to appropriate therapy.





- Consistently uses EBM-based approach to diagnostic evaluation and management.
- These objectives are met with minimal faculty input.
- Evaluation Methods: Review of the Chart, End of Rotation Competency Tool

Patient Care: Procedural skills

PGY-1 Masters cognitive, counseling, and technical skills for all procedures performed:

- PFTs
- Thoracentesis
- Begins to understand potential complications.
- Procedures performed with close faculty supervision.

PGY-2 Procedures performed with clear understanding of potential complications and occasional faculty supervision as needed.

- Teaches procedures to interns and students if present.
- Demonstrate interpretation of pulmonary function tests.
- Demonstrate a basic awareness of the key interpretations in a sleep study and how to translate that into advice for the patient.

PGY-3 Teaches capably about procedural skills.

- Evaluation Methods:
 - Procedure Log
 - End of Rotation Competency Tool

Patient Care: Consultation Process

PGY-1 Plan goals of consultation:

- Clarify questions by primary referring team
- Differential dx based on hx, exam and prior studies
- Recommend further studies and therapy, with summary of indications and risks

Page Break

PGY-2 Develops strategy for managing patient referrals and follow-up.

Serves as an effective consultant.

PGY-3 Consultation provided with EBM literature

Evaluation Methods: End of Rotation Competency Tool

Medical Knowledge

PGY-1 Applies relevant clinical and basic science knowledge in the following common medical conditions:

- COPD
- Asthma
- Pneumonia





- Lung transplantation
- Pulmonary malignancy
- Infections in the immunocompromised host
- Sleep-disordered breathing
- Pleural diseases
- Pulmonary hypertension
- Cystic fibrosis
- ARDS
- PGY-2 Demonstrates a progression in content knowledge and analytical thinking with well formulated differential diagnoses and management plans.
- PGY-3 Understanding and application of medical literature related to common medical conditions.
- Evaluation Methods: Attending Review of the EMR Record, End of Rotation Competency Tool

Interpersonal Skills and Communication

PGY-1 Effectively establishes rapport with patients and families.

- Communicates well with primary referring team and other consultants.
- Presents on rounds in an organized and articulate fashion.
- Functions as an effective consult team member.
- Provides timely and thorough electronic documentation of patient care.

PGY-2 Effectively carries out difficult discussions, such as sensitive topic discussions with moderate faculty input.

- Provides teaching and feedback to more junior team members on their communication styles.
- Functions as an effective team leader.

PGY-3 Able to deal with the most challenging patients and families with minimal direction.

- Coordinates team communication to optimize patient care.
- Functions as an effective team leader with decreasing reliance on attending.
- Functions as a consultant.
- Evaluation Methods: Mini Cex, End of Rotation Competency Tool

Professionalism

PGY-1 Strives for patient care and knowledge excellence.

- Reliably accomplishes assigned tasks
- Demonstrates integrity, respect for others, honesty and compassion.
- Demonstrates timely completion of administrative tasks and documentation.

PGY-2 Strives for patient care and knowledge excellence.

- Reliably identifies and accomplishes necessary tasks.
- Sets a tone of respect and collegiality for the team.

PGY-3 Acts as role model for patient care and professional behavior.





Evaluation Methods: Conference Attendance Sheet, End of Rotation Competency Tool

Practice Based Learning and Improvement

PGY-1 Seeks and accepts feedback from team about patient care, organization and presentations. Learns basic EBM principles, and article review.

• Understands limits of own knowledge, and seeks help.

PGY-2 Understands EBM principles, and begins to utilize relevant research to support decision-making and teaching of junior team members.

• Identifies knowledge deficiencies and seeks to correct them.

PGY-3 Appropriately integrates EBM with expert opinions and professional judgment.

- Ability to accurately self-assess skills and performance.
- Evaluation Methods: End of Rotation Competency Tool