Educational Goals: IM Residents will train on Pulmonary consult services and clinics to:

- Learn to recognize and to treat the major clinical syndromes and diseases encountered in pulmonary medicine.
- To learn the appropriate use, interpretation, and troubleshooting of invasive monitoring equipment used in the ICU.
- To 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.
- To 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.

<table>
<thead>
<tr>
<th>Patient Care: History Taking</th>
<th>Resident Competency Evaluation Form, Mini-CEX</th>
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</thead>
</table>
| **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. |

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<tr>
<th>Patient Care: Physical Exam</th>
<th>Resident Competency Evaluation Form, Mini-CEX</th>
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| **PGY-1**                   | Performs accurate and complete physical examination.  
Particular 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. |

<table>
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<tr>
<th>Pt care: Medical Decisions</th>
<th>Methods: Resident Competency Evaluation Form, Chart Review/documentation</th>
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</table>
| **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. |
### Patient Care: Procedural Skills

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<tr>
<th>PGY Level</th>
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| **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. |
| **PGY-3** | Teaches capably about procedural skills. |

### Patient Care: Consultation Process

<table>
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<th>PGY Level</th>
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| **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 |
| **PGY-2** | Develops strategy for managing patient referrals and follow-up.  
Serves as an effective consultant. |
| **PGY-3** | Consultation provided with EBM literature |

### Medical Knowledge

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| **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. |

### Interpersonal Skills and Communication

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<th>PGY Level</th>
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| **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. |

### Professionalism

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| **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. |
### Practice Based Learning and Improvement

<table>
<thead>
<tr>
<th>PGY-1</th>
<th>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.</th>
</tr>
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<tbody>
<tr>
<td>PGY-2</td>
<td>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.</td>
</tr>
<tr>
<td>PGY-3</td>
<td>Appropriately integrates EBM with expert opinions and professional judgment. Ability to accurately self-assess skills and performance.</td>
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