

VAMC PULMONARY/CCM SERVICE

Location:

Seattle VA Medical Center

FACULTY CONTACT:

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OVERALL EDUCATIONAL PURPOSE

- A. To acquire knowledge of and have clinical experience in the management of a wide variety of problems in patients with pulmonary diseases, including obstructive lung diseases, pulmonary infections, pulmonary malignancy, occupational and environmental lung disease, acute lung injury/ARDS, spinal cord injury, and disorders of the pleura and mediastinum.
- B. To acquire knowledge of and gain clinical experience in the management of critically ill patients and to develop clinical competence and understanding of pulmonary physiology and pathophysiology, acid-base and electrolyte physiology, and metabolic, nutritional and endocrine effects of critical illness.
- C. To acquire knowledge of and ability to interpret chest x-rays, thoracic CT scans, radionuclide lung scans, and pulmonary angiograms.
- D. To develop competence in performing procedures necessary for the provision of care to both pulmonary and critically ill patients, including understanding of all modalities of mechanical ventilation, oxygen delivery devices, weaning and respiratory care techniques, management of pneumothorax, interpretation of pulmonary function tests, thoracentesis, pleural biopsy and fiberoptic bronchoscopy.
- E. To become more skilled and sensitive in interacting with patients, families and caregivers by developing clinical competence in the ethical, legal and economic aspects of critical illness.

TEAM STRUCTURE

Pulmonary and Critical Care Attending

Pulmonary and Critical Care Fellow

0-1 Internal Medicine R2 or R3

0-1 Medical student

PRINCIPLE TEACHING METHODS

Case discussion and review

All ICU patients admitted to the medical service are seen and evaluated by the fellow and attending on at least a daily basis. The fellow and attending supervise the care provided by the medicine service to these patients.

Inpatients on whom the Pulmonary Service has been asked to consult are seen initially by the student, senior resident, or fellow. Each patient is subsequently discussed with a Pulmonary and Critical Care attending who also interviews and examines the patient on the same day the consult is requested. Follow-up rounds are made daily, or less frequently, depending on the specific problem encountered.

Rounds

ICU rounds with the primary medicine team occur every morning. Rounds involve both management decisions as well as bedside teaching. The team rounds on all new and active consults on a daily basis as well.

Didactics

Multiple didactic sessions are held, including a weekly post-clinic conference (Tuesday, 4:30), Seattle-Area Chest Grant Rounds (Thursdays, 12:15) and Respiratory Care Conference (Thursdays, 1:30), VA Chief-of-Medicine Rounds (Tuesdays, 11:15), the Department's Medical Grand Rounds (Thursdays, 8:00 am), and the weekly Seattle VAMC autopsy conference (Fridays, 1:00).

EDUCATIONAL CONTENT

Mix of Diseases

The entire spectrum of clinical presentations of obstructive lung disease, asthma, lung cancer, and sleep apnea are seen. Special pulmonary problems of patients with spinal cord injury and bone marrow transplantation are also seen. Occupational disease, particularly asbestos-related lung disease, is seen. Bronchiectasis, pulmonary vascular disease, interstitial lung diseases, benign neoplasms of the lung, and pleural diseases are also seen.

Patient Characteristics

The VA patient population is predominantly male with a bimodal age distribution of 45 and 70. Ethnic minorities are well represented.

Types of Clinical Encounters

The fellow supervises and actively participates in patient care and decision making in the MICU. Outside the MICU, the fellow functions as a consultant to physicians on the Medical, Surgical, Neurological, and Psychiatric wards, and in the Bone Marrow and Spinal Cord Injury units. The fellow takes on primary care responsibilities in the outpatient Pulmonary Clinic one half day per week.

Procedures

Fellows perform diagnostic and therapeutic bronchoscopy, transbronchial and endobronchial biopsies, fluoroscopically-guided bronchoscopic biopsies, and bronchoalveolar lavage under the direct supervision of the Pulmonary Attending. Thoracostomy tube placement and management occurs under the supervision of the Surgical Service or Pulmonary Attending. Other common procedures performed include:

closed pleural biopsies

placement of pulmonary artery catheters and arterial lines

endotracheal tube placement (under the direct supervision of the Anesthesia Service or Pulmonary Attending).

thoracentesis

paracentesis

lumbar puncture

Services

The VA Medical Center has the full range of medical and support services including all medicine subspecialties, Neurology, Surgery, Anesthesia, Radiology, Pathology, Respiratory Therapy, and Laboratory Medicine. The team oversees the pulmonary function and exercise testing laboratories, as well as the Respiratory Therapy Department.

Rotation Specific Schedule

Monday

Tuesday

Wednesday

Thursday

Friday

Call and Weekend Responsibilities

There is no in-house call on this rotation. Fellows take home call but are rarely required to return to the hospital after hours. Night call is split with resident on service, if any. The fellow is provided with at least 24 hours free of all clinical responsibility every seven days, with most fellows opting to achieve this by taking every other weekend off.

Principle Educational Materials Used Recommended Readings

Selected medical and pulmonary textbooks as well as the Division syllabus are available in the Pulmonary Section Library and in the Chief Medical Resident's office. Computer literature searching is available in the pulmonary fellow/resident office. Access to the VA Puget Sound Health Care System Library is available 24 hours/day to obtain mainstream journal articles.

Pathologic materials

All pathologic materials (including BAL, sputum stains and cultures and pleural fluid samples) obtained in the evaluation of patients will be reviewed by the fellow and the interpretation will be confirmed with the attending. All lung biopsy samples will be directly reviewed by the fellow, attending and the consulting pulmonary pathologist.

METHODS USED IN EVALUATING RESIDENT AND PROGRAM PERFORMANCE

At the end of the rotation, the fellow is evaluated in writing and their performance reviewed with them verbally by every attending he or she has interacted with for more than seven days. The evaluator rates the fellow on a nine-point scale in each component of clinical competence (i.e. patient care, medical knowledge, practice based learning improvement, interpersonal and communication skills, professionalism, system based learning, educational attitudes, leadership, overall clinical competence).

The fellow is given the opportunity to evaluate in writing the quality of the curriculum and the extent to which the educational goals and objectives of the rotation have been met. The fellow also evaluates the teaching competence of each attending with whom s/he has interacted for a significant amount of time.

EXPLICIT LINES OF RESPONSIBILITY FOR CARE OF PATIENTS ON THIS SERVICE

The Pulmonary and Critical Care attending is ultimately responsible for the care of patients on the MICU and consult services. The attending will see and evaluate all MICU patients on at least a daily basis. Stable MICU and consultation patients may initially be seen by the student or resident. The fellow will supervise the resident and/or medical student on the service in the development of a plan of care.