

January 2019

Goals and Objectives for the Respiratory Rotation

During this rotation, the resident will develop the knowledge base, skills and attitudes to provide comprehensive evaluation and care of patients with respiratory diseases in both inpatient and ambulatory settings.

The Respiratory rotation within the Internal Medicine Program at Memorial University of Newfoundland at either the Health Science Centre or St. Clare's Mercy Hospital. It will provide the appropriate training for the resident to acquire the competency and skills required to manage common respiratory disorders at the level of a specialist in General Internal Medicine. The resident will acquire the requisite knowledge, skills and attitudes to be able to recognize, investigate, and manage adult respiratory diseases. The resident will also learn the appropriate indications for referral of patients to physicians with additional training/expertise in Respiratory Medicine.

The clinical experience will include opportunities to observe and manage inpatients and outpatients with a wide variety of pulmonary disorders. The residents will be given opportunities to assume continuing responsibility for both acutely and chronically ill patients in order to learn the natural history of pulmonary disease as well as the effectiveness of therapeutic interventions.

The acquired knowledge base will include an appreciation of general internal medicine and the basic sciences relevant to respiratory. The teaching will include an emphasis on pulmonary physiology and its correlation with clinical disorders. In addition, the resident will acquire the necessary clinical skills to treat and counsel patients with diseases affecting the respiratory system. The residents will learn the appropriate use of diagnostic tests, including laboratory investigations, pulmonary function testing, and various diagnostic-imaging procedures. The resident will work within the health care team and develop the skills to be an effective leader of junior physicians and other health care personnel. In accordance with CBD principles, all residents are required to submit EPA assessments with documented narrative coaching via the MUNCAT app per week to evaluate and guide their progress. This will also be documented using an end of rotation in-training evaluation report (ITER) or longitudinal rotational assessment, depending on the applicable resident curriculum.

In addition to the rotational objectives and key competencies described below, the following EPAs may be covered during the Respiratory rotation. These will depend on the learner's stage of training, progress and individual learning needs. The learning contract and rotational goals created at the beginning of the rotation can help specify which EPAs the learner may want to focus on throughout their rotation.

Transition to Discipline:

TD1: Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care

TD3: Performing the basic procedures of internal medicine

Foundations:

F1: Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings

F7: Identifying personal learning needs while caring for patients, and addressing those needs

Core:

C1: Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations

C2: Assessing and managing patients with complex chronic conditions

C3: Providing internal medicine consultation to other clinical services

C5: Performing the procedures of Internal Medicine

C7: Discussing serious and/or complex aspects of care with patients, families, and caregivers

C10: Implementing health promotion strategies in patients with or at risk for disease

MEDICAL EXPERT

Demonstrate the competency and skills required to manage common respiratory disorders at the level of a specialist in General Internal Medicine. The resident will acquire the requisite knowledge, skills and attitudes to be able to recognize, investigate, and manage adult respiratory diseases. The resident will also learn the appropriate indications for referral of patients to physicians with additional training / expertise in Respiratory Medicine.

- 1.** Demonstrate diagnostic and therapeutic skills for the assessment and management of:
 - (a)** Respiratory disorders including chronic obstructive disease, asthma, pneumonia, lung cancer, acute and chronic respiratory failure, sleep disorders, pulmonary embolism, pleural disorders, and occupational and interstitial lung diseases.
 - (b)** Respiratory emergencies including upper airway obstruction, acute severe asthma, tension pneumothorax, massive hemoptysis.
- 2.** Interpret plain films of the chest using the principle of pattern recognition.
- 3.** Interpret pulmonary function tests, arterial blood gases, acid base abnormalities and pleural fluid analysis.
- 4.** Understand the indications and contra-indications for respiratory procedures (thoracentesis, CT guided biopsy, chest tube insertion, pleurodesis, bronchoscopy with or without biopsy and open lung biopsy).
- 5.** Perform appropriate histories in patients with common respiratory problems. Recognize and interpret abnormal physical findings on examination of the respiratory system.

6. Demonstrate knowledge of the clinical use, indications, contraindications and effective technique in performance of diagnostic and therapeutic thoracentesis
7. Understand the indications for and principles of V / Q scanning and CT scans of the chest.
8. Demonstrate ability to recognize, evaluate and manage urgent and emergent respiratory diseases.

COMMUNICATOR

1. To communicate effectively with patients, families, other physicians and allied health professionals. This includes providing concise, written and dictated consultation notes and letters. Maintain complete and accurate medical records.
2. Will demonstrate the ability to obtain a thorough yet relevant history from patients with respiratory disease.
3. Effectively present and discuss respiratory topics at teaching and patient care rounds.

SCHOLAR

1. Recognize and correct knowledge deficiencies in the aforementioned respiratory conditions, signs and symptoms, by means of personal continuing education.
2. Critically appraise medical literature as it pertains to managing patients with respiratory diseases and disorders.

By the end of the rotation, the trainee will:

1. Understand the physiology of:
 - (a) Airflow obstruction
 - (b) Pulmonary hypertension
 - (c) Respiratory failure
2. Understand the pathophysiology of:
 - (d) Asthma
 - (e) Chronic obstructive lung disease
 - (f) Obstructive /Central sleep apnea and obesity hypoventilation syndrome
 - (g) Pneumonia
 - (h) Pneumothorax
3. Understand the scientific evidence supporting investigation and management strategies in respiratory disease.
4. Have demonstrated critical review of the literature surrounding management of patients with respiratory disease.

COLLABORATOR

1. Work effectively with and enhance the interdisciplinary team involved in the delivery of medical care to respirology patients.
2. Participate in the multidisciplinary team management of respirology patients.
3. Recognize the roles of the following team members:
 - (a) Asthma and COPD Educator
 - (b) Physiotherapist
 - (c) Pulmonary Function Technologist
 - (d) Respiratory Therapist

LEADER

Utilize health care resource effectively and efficiently, demonstrating an awareness of the most cost effective way of managing patients.

HEALTH ADVOCATE

1. Recognize and respond to determinants of health which particularly affect one's respiratory health including socioeconomic status, financial resources, social supports and public health issues.
2. Understand the impact of economic and social factors which predispose to and/or exacerbate respiratory disease.
3. Understand the importance of preventive strategies in respirology particularly as they relate to:
 - (a) Asthma
 - (b) Chronic Obstructive Lung Disease
 - (c) Lung Cancer
 - (d) Pneumonia
 - (e) Tuberculosis
4. Have demonstrated appropriate attention to prevention counseling in patient encounters.

PROFESSIONAL

1. Demonstrate appropriate personal and professional behavior in interaction with patients and colleagues.
2. Demonstrate an awareness of an appropriate response to ethical issues in the management of respiratory illnesses such as palliative care, home ventilation, cardiopulmonary resuscitation, and withholding and withdrawing life support for respiratory failure.

These objectives will be acquired by the following methods:

1. Assignment to the respiratory service with exposure to inpatients, emergency room and outpatient components.
2. Direct interaction with the attending respirologist and discussion of patients on a case-by-case basis.
3. Both didactic and interactive teaching by the attending respirologist with a minimal of one hour of teaching per week as per the Minimal Teaching Requirements of the Internal Medicine Program.
4. Attendance at academic half-day, medical grand rounds, noon-time rounds, morning report and across-City chest rounds.
5. Learning about evidenced-based medicine and discussion of the relevant literature surrounding the patients on the respiratory service.
6. The teaching and procedural skills by the attending respirologist.
7. Self-directed learning.
8. Interaction with other members of the healthcare team.

These objectives will be evaluated by the following methods:

It is expected that trainees will demonstrate ongoing development in each of the CanMEDS roles such that the depth, sophistication, efficiency and proficiency of their performance increases with experience. Review of rotation objectives will be done in conjunction with creation of a learning contract at the beginning of the rotation. Trainees completing the program should expect to achieve the key competencies described. Verbal feedback will be given at the end of each night float shift. This will be formerly documented using an end of rotation in-training evaluation report (ITER). In accordance with CBD principles, weekly encounter cards and coaching are used to evaluate and guide trainee progress.

1. The trainee's knowledge base, clinical skills, and attitudes will be continually observed during ward rounds, clinics, and the more formal teaching rounds.
2. Oral and written case reports under the care of the trainee will be evaluated. The accuracy of history taking and physical findings will be assessed in two ways:
 - (a) By confirming the findings reported in the oral and written case reports.
 - (b) By direct observation of the trainee during performance of a witnessed complete or partial history and physical examination.
3. Clinical judgment of the trainee will be assessed by encouraging the trainee to commit themselves as to the diagnosis and management of a specific patient problem prior to their receiving input from the attending Respirologist.

4. Monitoring of attendance at academic half-day, medical grand rounds, noon-time rounds and morning report.
5. Professional attitudes such as communication skills, teaching skills and interpersonal relations will be assessed on an ongoing basis by observing the trainee's interactions with other members of the healthcare team. The attending staff may seek opinions from other members of the healthcare team concerning these aspects of the evaluation.
6. In-training evaluation report (ITER)
7. Direct observation and performance of procedures and completion of a procedural log.
8. Evaluation by the attending staff of the trainee's work-up and the management of patients seen during the occasional cross-coverage of other subspecialties while on-call.