

# Objectives of Training in the Specialty of Internal Medicine

**2011** VERSION 1.0

This document applies to those who begin training on or after July 1<sup>st</sup>, 2011.

(Please see also the "Policies and Procedures.")

#### DEFINITION

An Internist is a specialist trained in the diagnosis and treatment of a broad range of diseases in adults involving all organ systems, and is proficient in the medical management of patients who have undifferentiated or multi-system disease processes. An Internist cares for hospitalized and ambulatory patients and may play a role in teaching or research.

#### **GOALS**

Upon completion of training, a resident will be a competent specialist in Internal Medicine and will be able to fulfill a consultant's role in the specialty. The resident must acquire proficiency in the theoretical basis of the specialty, including its foundations in basic medical sciences and research. The overall aim of this physician training is to instill knowledge and understanding, skills and attitudes, from which are formed the competencies for lifetime practice as a physician in adult Internal Medicine.

Residents must demonstrate the requisite knowledge, skills, and attitudes for effective patient-centered care and service to a diverse population. In all aspects of specialist practice, the graduate must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

These Objectives of Training have three purposes:

- To provide a template for trainees in acquiring relevant knowledge, skills and attitudes in Internal Medicine
- To provide guidance for programs regarding required areas of training
- To provide a template for assessment of trainees

#### INTERNAL MEDICINE COMPETENCIES

Upon completion of residency training, Internists will show proficiency in the field by demonstrating:

- interviewing, problem formulation and treatment
- a developmental, cultural and lifespan perspective
- the ability to teach
- consultation, assesment and management referrals
- the ability to review and interpret the scientific literature

This is the minimum competency level required to achieve successful preparation for practice in Internal Medicine.

At the completion of this training, the resident will have acquired the following competencies and would be able to function effectively as a:

## **Medical Expert**

#### Definition:

As Medical Experts, Internal Medicine physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. Medical Expert is the central physician Role in the CanMEDS framework.

#### Key and Enabling Competencies: Internists are able to...

- 1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical, safe and patient-centered medical care
  - 1.1. Perform a consultation effectively, including the presentation of well-documented assessments and recommendations in written and/or verbal form in response to a request from another health care professional
  - 1.2. Synthesize and prioritize effectively problems that are complex and/or undifferentiated
  - 1.3. Describe the CanMEDS framework of competencies relevant to Internal Medicine
  - 1.4. Demonstrate effective use of all CanMEDS competencies relevant to Internal Medicine
  - 1.5. Identify and appropriately respond to relevant ethical issues arising in patient care
  - 1.6. Apply lifelong learning skills of the Scholar Role to implement a personal program to keep up-to-date, and enhance areas of professional competence
  - 1.7. Contribute to the enhancement of quality care and patient safety in Internal Medicine, integrating the available best evidence and best practices
  - 1.8. Demonstrate the ability to prioritize professional duties effectively and appropriately when faced with multiple patients and problems
  - 1.9. Demonstrate compassionate and patient-centered care

- 1.10. Recognize and respond to the ethical dimensions in medical decision-making
- 1.11. Demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony or advising governments, as needed

# 2. Establish and maintain proficiency in clinical knowledge, skills and attitudes appropriate to Internal Medicine

- 2.1. Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to the following clinical scenarios and conditions applicable to Internal Medicine including an understanding of the manifestations, investigation and management:
  - 2.1.1. Acute medicine
    - 2.1.1.1. Immediately life-threatening metabolic, cardiac, pulmonary, neurological gastrointestinal and other organ system dysfunction and abnormalities
    - 2.1.1.2. Hyperthermia / hypothermia
    - 2.1.1.3. Shock, including knowledge and identification of the different etiologies
    - 2.1.1.4. Cardio-respiratory arrest
    - 2.1.1.5. Poisoning
    - 2.1.1.6. Severe drug reactions including but not limited to anaphylaxis and toxic epidermal necrolysis
    - 2.1.1.7. Complications of chemotherapy
      - 2.1.1.7.1. Febrile neutropenia
      - 2.1.1.7.2. Tumour lysis syndrome
      - 2.1.1.7.3. Acute spinal cord compression
  - 2.1.2. Cardiac disease
    - 2.1.2.1. Chest pain
    - 2.1.2.2. Dyspnea
    - 2.1.2.3. Syncope
    - 2.1.2.4. Palpitations
    - 2.1.2.5. Cardiac murmurs
    - 2.1.2.6. Abnormal cardiac enzymes
    - 2.1.2.7. Congestive heart failure
    - 2.1.2.8. Coronary heart disease
    - 2.1.2.9. Acute coronary syndromes and their complications
    - 2.1.2.10. Valvular heart disease
    - 2.1.2.11. Cardiomyopathies

- 2.1.2.12. Pericarditis and pericardial effusion and tamponade
- 2.1.2.13. Pulmonary hypertension
- 2.1.3. Vascular disease
  - 2.1.3.1. Hypertension
  - 2.1.3.2. Claudication
  - 2.1.3.3. Edema
  - 2.1.3.4. Aortic aneurysm
  - 2.1.3.5. Venous thrombo-embolic disease and prophylaxis
  - 2.1.3.6. Peripheral arterial disease
  - 2.1.3.7. Peripheral venous insufficiency
  - 2.1.3.8. Venous and arterial ulcers
- 2.1.4. Pulmonary disease
  - 2.1.4.1. Acute dyspnea
  - 2.1.4.2. Chronic dyspnea
  - 2.1.4.3. Cough
  - 2.1.4.4. Wheeze
  - 2.1.4.5. Hemoptysis
  - 2.1.4.6. Superior vena cava syndrome
  - 2.1.4.7. Interpretation of Pulmonary Function Testing
  - 2.1.4.8. Pneumonia
  - 2.1.4.9. Chronic obstructive lung disease
  - 2.1.4.10. Bronchial asthma
  - 2.1.4.11. Interstitial lung disease
  - 2.1.4.12. Pulmonary embolism
  - 2.1.4.13. Pneumothorax
  - 2.1.4.14. Pleural effusion
  - 2.1.4.15. Sarcoidosis
  - 2.1.4.16. Lung cancer: primary and metastatic including paraneoplastic syndromes
- 2.1.5. Gastrointestinal disease
  - 2.1.5.1. Upper and lower gastrointestinal hemorrhage
  - 2.1.5.2. Dysphagia
  - 2.1.5.3. Nausea and vomiting

- 2.1.5.4. Chest pain
- 2.1.5.5. Regurgitation
- 2.1.5.6. Acute and chronic abdominal pain
- 2.1.5.7. Malabsorption syndromes
- 2.1.5.8. Acute and chronic diarrhea
- 2.1.5.9. Acute and chronic constipation
- 2.1.5.10. Abnormal liver enzymes
- 2.1.5.11. Jaundice
- 2.1.5.12. Ascites
- 2.1.5.13. Encephalopathy
- 2.1.5.14. Bacterial peritonitis
- 2.1.5.15. Intestinal obstruction
- 2.1.5.16. Esophageal disease
  - 2.1.5.16.1. Gastro-esophageal reflux and its complications
  - 2.1.5.16.2. Esophageal motility disorders
  - 2.1.5.16.3. Esophageal cancer
  - 2.1.5.16.4. Hiatus hernia
  - 2.1.5.16.5. Esophageal varices
- 2.1.5.17. Gastro-duodenal disease
  - 2.1.5.17.1. Peptic ulcers
  - 2.1.5.17.2. Gastritis
  - 2.1.5.17.3. Gastric motility disorders
  - 2.1.5.17.4. Gastric cancer
- 2.1.5.18. Pancreatic disease
  - 2.1.5.18.1. Acute and chronic pancreatitis
  - 2.1.5.18.2. Pancreatic cancer
- 2.1.5.19. Biliary tract disease
  - 2.1.5.19.1. Cholelithiasis and its complications
  - 2.1.5.19.2. Sclerosing cholangitis
  - 2.1.5.19.3. Biliary cancers
- 2.1.5.20. Small and large bowel disease

- 2.1.5.20.1. Celiac disease and other diseases causing malabsorption
- 2.1.5.20.2. Inflammatory bowel disease
- 2.1.5.20.3. Infectious diseases
- 2.1.5.20.4. Small bowel neoplasia
- 2.1.5.20.5. Colorectal Cancer
- 2.1.5.20.6. Diverticular disease
- 2.1.5.20.7. Irritable bowel syndrome

### 2.1.5.21. Liver disease

- 2.1.5.21.1. Acute and chronic hepatitis
- 2.1.5.21.2. Biliary tract diseases
- 2.1.5.21.3. Cirrhosis and its complications
- 2.1.5.21.4. Cancer: primary and metastatic

# 2.1.6. Kidney Disease

- 2.1.6.1. Fluid and electrolyte abnormalities
- 2.1.6.2. Acid-base disturbances
- 2.1.6.3. Acute renal failure and oliguria
- 2.1.6.4. Hematuria
- 2.1.6.5. Proteinuria
- 2.1.6.6. Complications of chronic renal disease
- 2.1.6.7. Renal replacement therapy and transplantation
- 2.1.6.8. Nephritic and Nephrotic syndromes
- 2.1.6.9. Glomerulonephritis
- 2.1.6.10. Acute tubular necrosis
- 2.1.6.11. Interstitial nephritis
- 2.1.6.12. Renovascular hypertension
- 2.1.6.13. Renal tubular acidosis
- 2.1.6.14. Renal calculi
- 2.1.6.15. Renal complications of diabetes, hypertension and rhabdomyolysis

#### 2.1.7. Endocrine and Metabolic Disorders

- 2.1.7.1. Weight gain and loss
- 2.1.7.2. Obesity

- 2.1.7.3. Fatigue and malaise
- 2.1.7.4. Amenorrhea and loss of libido
- 2.1.7.5. Hirsutism
- 2.1.7.6. Galactorrhea and gynecomastia
- 2.1.7.7. Lipid disorders
- 2.1.7.8. Pituitary masses
- 2.1.7.9. Hyper- and hypoglycemia
- 2.1.7.10. Hyper- and hypocalcemia
- 2.1.7.11. Thyroid enlargement and nodules
- 2.1.7.12. Hyper and hypothyroidism
- 2.1.7.13. Hyper and hypoparathyroidism
- 2.1.7.14. Diabetes mellitus: type I and type 2
- 2.1.7.15. Complications of diabetes including diabetic foot and neuropathy
- 2.1.7.16. Adrenal masses
- 2.1.7.17. Hyper and hypoadrenalism
- 2.1.7.18. Porphyrias
- 2.1.7.19. Hyper and hypogonadism
- 2.1.7.20. Pancreatic endocrine tumours
- 2.1.7.21. Neural crest tumours
- 2.1.8. Diseases of the Nervous System
  - 2.1.8.1. Altered mental status and disorders of consciousness
  - 2.1.8.2. Dementia and delirium
  - 2.1.8.3. Syncope
  - 2.1.8.4. Dizziness and vertigo
  - 2.1.8.5. Tremors
  - 2.1.8.6. Acute and chronic headache
  - 2.1.8.7. Localized and generalized weakness
  - 2.1.8.8. Alcohol abuse and withdrawal
  - 2.1.8.9. Movement disorders including Parkinson's syndrome
  - 2.1.8.10. Seizure disorders and status epilepticus
  - 2.1.8.11. Meningitis and encephalitis
  - 2.1.8.12. Multiple sclerosis
  - 2.1.8.13. Brain tumours
  - 2.1.8.14. Increased intracranial pressure

- 2.1.8.15. Determination of brain death
- 2.1.8.16. Abnormal cranial nerve function
- 2.1.8.17. Cerebral vascular disease: stroke and transient ischemic attack (TIA)
- 2.1.8.18. Guillian-Barré syndrome
- 2.1.8.19. Amyotrophic lateral sclerosis
- 2.1.8.20. Acute spinal cord compression
- 2.1.8.21. Peripheral neuropathy
- 2.1.8.22. Myasthenia gravis

## 2.1.9. Diseases of blood and blood-forming organs

- 2.1.9.1. Anemia
- 2.1.9.2. Myelodysplastic disorders
- 2.1.9.3. Myeloproliferative disorders
- 2.1.9.4. Leukemia
- 2.1.9.5. Eosinophilia
- 2.1.9.6. Congenital and acquired bleeding disorders including, but not limited to hemophilia, diffuse intravascular coagulation and thrombocytopenic purpura
- 2.1.9.7. Anticoagulant therapy
- 2.1.9.8. Hypercoaguable states
- 2.1.9.9. Thrombosis and thrombophilia
- 2.1.9.10. Lymphadenopathy
- 2.1.9.11. Lymphoma
- 2.1.9.12. Splenomegaly
- 2.1.9.13. Complications of systemic chemotherapy
- 2.1.9.14. Transfusion of blood products
- 2.1.9.15. Multiple myeloma and other dysproteinemias

#### 2.1.10. Diseases of the musculo-skeletal system

- 2.1.10.1. Acute monoarthritis
- 2.1.10.2. Acute and chronic polyarthritis
- 2.1.10.3. Low back pain
- 2.1.10.4. Proximal muscle weakness
- 2.1.10.5. Muscular pain
- 2.1.10.6. Raynaud's phenomenon

- 2.1.10.7. Gout and pseudogout
- 2.1.10.8. Septic arthritis
- 2.1.10.9. Osteomyelitis
- 2.1.10.10. Osteoarthritis
- 2.1.10.11. Rheumatoid arthritis
- 2.1.10.12. Sero-negative arthropathies
- 2.1.10.13. Sjögren's syndrome
- 2.1.10.14. Systemic lupus erythematosis
- 2.1.10.15. Scleroderma
- 2.1.10.16. Temporal arteritis and polymyalgia rheumatica
- 2.1.10.17. Ankylosing spondylitis
- 2.1.10.18. Fibromyalgia
- 2.1.10.19. Paget's disease of bone
- 2.1.10.20. Primary and secondary tumours

# 2.1.11. Diseases of the immune system

- 2.1.11.1. Prevention of opportunistic infections
- 2.1.11.2. Immunocompromise in the patient with cancer
- 2.1.11.3. Immunocompromise due the use of immunomodulatory agents
- 2.1.11.4. Immunoglobulin deficiencies
- 2.1.11.5. Amyloidosis

### 2.1.12. Diseases of the skin and appendages

- 2.1.12.1. Hyperpigmented lesions
- 2.1.12.2. Petechiae, purpura, ecchymoses
- 2.1.12.3. Bullous skin disease
- 2.1.12.4. Urticaria
- 2.1.12.5. Maculopapular eruptions
- 2.1.12.6. Pruritis
- 2.1.12.7. Abnormalities of nails
- 2.1.12.8. Clubbing
- 2.1.12.9. Arterial and venous insufficiency
- 2.1.12.10. Systemic disease with skin and nail manifestations
  - 2.1.12.10.1. Nutritional deficiencies
  - 2.1.12.10.2. Inflammatory bowel disease

- 2.1.12.10.3. Celiac disease
- 2.1.12.10.4. Malignancy
- 2.1.12.10.5. Connective tissue disease
- 2.1.12.10.6. Endocrine and metabolic disease
- 2.1.12.10.7. Systemic immunosuppression
- 2.1.12.11. Eczema
- 2.1.12.12. Stasis dermatitis
- 2.1.12.13. Psoriasis
- 2.1.12.14. Erythema nodosum
- 2.1.12.15. Herpes zoster
- 2.1.12.16. Stevens-Johnson syndrome
- 2.1.12.17. Toxic epidermal necrolysis
- 2.1.12.18. Disseminated Herpes simplex
- 2.1.12.19. Skin cancer and premalignant conditions
- 2.1.13. Diseases associated with infectious agents
  - 2.1.13.1. Pneumonia
  - 2.1.13.2. Urosepsis
  - 2.1.13.3. Infective endocarditis
  - 2.1.13.4. Meningitis and encephalitis
  - 2.1.13.5. Cellulitis and other skin infections
  - 2.1.13.6. Bone and joint infections
  - 2.1.13.7. Intra-abdominal infections
  - 2.1.13.8. Necrotizing soft tissue infections
  - 2.1.13.9. Infectious diarrhea
  - 2.1.13.10. Fever of unknown origin
  - 2.1.13.11. Fever in the immuno-compromised host
  - 2.1.13.12. Fever in the hospitalized patient
  - 2.1.13.13. Fever, skin diseases and diarrhea in the returning traveler
  - 2.1.13.14. Sexually transmitted infections
  - 2.1.13.15.Malaria
  - 2.1.13.16. Tuberculosis including intradermal testing and interpretation
  - 2.1.13.17. Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and its treatment and complications, including but not limited to:

- 2.1.13.17.1. Fever
- 2.1.13.17.2. Weight loss
- 2.1.13.17.3. Dyspnea, cough, hemoptysis
- 2.1.13.17.4. Dysphagia, diarrhea
- 2.1.13.17.5. Anemia, neutropenia, thrombocytopenia
- 2.1.13.17.6. Metabolic derangements
- 2.1.13.17.7. Opportunistic infections
- 2.1.13.18. Clostridium difficile colitis
- 2.1.13.19. Spectrum of activity, adverse effects and dose adjustments for antibiotics
- 2.1.13.20. Infection control in the hospital setting
- 2.1.14. Medical aspects of specific situations
  - 2.1.14.1. Surgery
    - 2.1.14.1.1. Peri-operative assessment and management of patients with/on:
      - 2.1.14.1.1.1. Heart, lung, metabolic and kidney diseases
      - 2.1.14.1.1.2. Type I and type 2 diabetes
      - 2.1.14.1.1.3. Anticoagulants and anti-platelet agents
      - 2.1.14.1.1.4. Hypertension
      - 2.1.14.1.1.5. Arrhythmias, cardiac ischemia, pulmonary edema, lung disease, glucose abnormalities
      - 2.1.14.1.1.6. Prophylaxis for infective endocarditis and venous thromboembolism
  - 2.1.14.2. Occupational considerations in Internal Medicine
    - 2.1.14.2.1. Assessment of fitness to work
  - 2.1.14.3. Medical aspects of mental illness
    - 2.1.14.3.1. Effects and side effects of psychiatric medications
    - 2.1.14.3.2. Depression presenting as physical illness
    - 2.1.14.3.3. Effects of depression on the course of medical disease
  - 2.1.14.4. Pregnancy
    - 2.1.14.4.1. Hypertension and hypertensive disorders
    - 2.1.14.4.2. Valvular heart disease
    - 2.1.14.4.3. Seizures and seizure disorders

2.1.14.4.4.	Thrombocytopenia
2.1.14.4.5.	Disorders of glucose homeostasis including diabetes mellitus
2.1.14.4.6.	Abnormal liver tests
2.1.14.4.7.	Proteinuria
2.1.14.4.8.	Venous thromboembolic disease
2.1.14.4.9.	Cardiomyopathy
2.1.14.4.10.	Endocarditis prophylaxis
2.1.14.4.11.	Asthma
2.1.14.4.12.	Liver diseases of pregnancy
2.1.14.4.13.	Infectious diseases including but not limited to HIV and hepatitis
2.1.14.4.14.	Pregnancy induced change in blood volume, hemodynamics, cardio-respiratory and renal physiology
2.1.14.4.15.	Drug prescribing in pregnancy and post-partum period
2.1.14.5. The elderly	
2.1.14.5.1.	Atypical presentations of common diseases
2.1.14.5.2.	Delirium
2.1.14.5.3.	Dementia including, but not limited to Alzheimer's disease, Lewy-body, vascular and frontal lobe dementias
2.1.14.5.4.	Depression
2.1.14.5.5.	Urinary and fecal incontinence
2.1.14.5.6.	Constipation
2.1.14.5.7.	Gait instability
2.1.14.5.8.	Falls
2.1.14.5.9.	Neglect/abuse
2.1.14.5.10.	Rational drug prescribing
2.1.14.6. End of life	
2.1.14.6.1.	Pain
2.1.14.6.2.	Dyspnea
2.1.14.6.3.	Delirium
2.1.14.6.4.	Constipation
2.1.14.6.5.	Use of opiods and other medications
2.1.14.6.6.	Nausea and vomiting

- 2.1.14.6.7. Nutritional deficiencies
- 2.1.14.6.8. Terminal phase of malignant and non-malignant illness

## 2.1.14.7. Malignancy

- 2.1.14.7.1. Oncologic emergencies including, but not limited to:
  - 2.1.14.7.1.1. Hypercalcemia
  - 2.1.14.7.1.2. Spinal cord compression
  - 2.1.14.7.1.3. Superior vena cava syndrome
  - 2.1.14.7.1.4. Pleural and pericardial effusion
  - 2.1.14.7.1.5. Tumour lysis syndrome
- 2.1.14.7.2. Screening and prevention
- 2.1.14.7.3. Chemotherapy induced symptoms, such as Myelosuppression and Hyperemesis
- 2.1.14.7.4. Most cancers are included with the relevant systems. The resident must be familiar with the principles of diagnosis, and treatment. Cancers not previously discussed including, but not limited to:
  - 2.1.14.7.4.1. Breast cancer
  - 2.1.14.7.4.2. Ovarian cancer
  - 2.1.14.7.4.3. Endometrial and cervical cancer
  - 2.1.14.7.4.4. Transitional cell cancer
  - 2.1.14.7.4.5. Prostate cancer
  - 2.1.14.7.4.6. Head and neck cancers
- 2.1.14.7.5. Para-neoplastic syndromes

#### 3. Perform a complete and appropriate assessment of a patient

- 3.1. Identify and explore issues to be addressed in a patient encounter, including the patient's context and preferences, and the impact of illness on the patient's life
- 3.2. Elicit a history that is relevant, concise and accurate to context and preferences for the purposes of prevention and health promotion, diagnosis and/or management
  - 3.2.1. Elicit information relevant to a risk profile for disease
  - 3.2.2. Obtain relevant information from the family history
  - 3.2.3. Elicit an accurate occupational history, as appropriate, with documentation of the patient's exposure to occupational health hazards, safety risks and job demands for commonly encountered occupations

- 3.3. Perform a focused physical examination that is relevant and accurate for the purposes of prevention and health promotion, diagnosis and/or management, including:
  - 3.3.1. Perform a functional assessment of basic and instrumental activities of daily living, mental status examination, assessment of competency and capacity for decision-making and assessment of gait and balance for elderly patients
  - 3.3.2. Perform a quantitative measure of performance status for patients with malignancy
- 3.4. Select medically appropriate investigative methods in a resource-effective and ethical manner
- 3.5. Demonstrate effective clinical problem solving and judgment to address patient problems, including interpreting available data and integrating information to generate differential diagnoses and management plans

#### 4. Use preventive and therapeutic interventions proficiently

- 4.1. Implement an effective management plan in collaboration with a patient and family
- 4.2. Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to Internal Medicine. These include, but are not limited to:
  - 4.2.1. Use of medications
  - 4.2.2. Life-style changes
  - 4.2.3. Modification of addictive behaviors
  - 4.2.4. Physical therapies
  - 4.2.5. Nutrition
  - 4.2.6. Complementary medicine
- 4.3. Ensure appropriate informed consent is obtained for therapies
- 4.4. Ensure patients receive appropriate end-of-life care

# 5. Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic

- 5.1. Demonstrate effective, appropriate, and timely performance of the following diagnostic and therapeutic procedures relevant to Internal Medicine including indications benefits, risks and interpretation of results.
  - 5.1.1. Establishing an airway, bag and mask ventilation, mouth-to-mask ventilation, and use of hand-held resuscitators
  - 5.1.2. Invasive and non-invasive mechanical ventilation
  - 5.1.3. Insertion and care of peripheral arterial catheters

- 5.1.4. Venous access including central line placement in elective and emergency situations
- 5.1.5. Cardiopulmonary resuscitation
  - 5.1.5.1. Combined assisted ventilation and external cardiac compression in one-person and two-person rescue
  - 5.1.5.2. External cardiac defibrillation
  - 5.1.5.3. Endotracheal intubation
  - 5.1.5.4. Emergency trans-cutaneous pacing
  - 5.1.5.5. Diagnosing and managing life threatening cardiac arrhythmias
- 5.1.6. Electrocardiograms
- 5.1.7. Diagnostic and therapeutic thoracentesis
- 5.1.8. Diagnostic and therapeutic abdominal paracentesis
- 5.1.9. Lumbar puncture
- 5.1.10. Knee arthrocentesis
- 5.2. Ensure appropriate informed consent is obtained for procedures
- 5.3. Document and disseminate information related to procedures performed and their outcomes
- 5.4. Ensure adequate follow-up is arranged for procedures performed

# 6. Seek appropriate consultation from other health professionals, recognizing the limits of one's own expertise

- 6.1. Demonstrate insight into their own limitations of expertise
- 6.2. Demonstrate effective, appropriate, and timely consultation of another health professional as needed for optimal patient care
- 6.3. Arrange appropriate follow-up care services for a patient and their family

#### Communicator

#### Definition:

As Communicators, Internists effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

## Key and Enabling Competencies: Internists are able to proficiently...

# 1. Develop rapport, trust, and ethical therapeutic relationships with patients and families

- 1.1. Recognize that being a good communicator is a core clinical skill for physicians, and that effective physician-patient communication can foster patient satisfaction, physician satisfaction, adherence and improved clinical outcomes
- 1.2. Establish positive therapeutic relationships with patients and their families that are characterized by understanding, trust, respect, honesty and empathy
- 1.3. Respect patient confidentiality, privacy and autonomy
- 1.4. Listen effectively
- 1.5. Be aware of and responsive to nonverbal cues
- 1.6. Facilitate a structured clinical encounter effectively

# 2. Accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals

- 2.1. Gather information about a disease and about a patient's beliefs, concerns, expectations and illness experience
- 2.2. Seek out and synthesize relevant information from other sources, such as a patient's family, caregivers and other professionals

# 3. Convey relevant information and explanations accurately to patients and families, colleagues and other professionals

- 3.1. Deliver information to a patient and family, colleagues and other professionals in a humane manner and in such a way that it is understandable, encourages discussion and participation in decision-making
  - 3.1.1. Demonstrate proficiency at counseling for HIV antibody testing
  - 3.1.2. Promote patient safety through effective health care communication
- 3.2. Communicate effectively with patients and their caregivers about terminal illness and bereavement, including:
  - 3.2.1. Care of the dying
  - 3.2.2. Decision making concerning resuscitation
  - 3.2.3. Immediate aftermath of bereavement
  - 3.2.4. Organ donation requests
  - 3.2.5. Demonstrating sensitivity to the emotional and psychological impact of acute emergency situations on patients, families and staff, together with the capability of providing appropriate counseling

# 4. Develop a common understanding on issues, problems and plans with patients, families, and other professionals to develop a shared plan of care

- 4.1. Identify and explore problems to be addressed from a patient encounter effectively, including the patient's context, responses, concerns, and preferences
  - 4.1.1. Identify and respect important ethical and legal issues in caring for elderly people.
- 4.2. Respect diversity and difference, including but not limited to the impact of gender, religion and cultural beliefs on decision-making
- 4.3. Encourage discussion, questions, and interaction in the encounter
- 4.4. Engage patients, families, and relevant health professionals in shared decision-making to develop a plan of care
- 4.5. Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding

### 5. Convey effective oral and written information about a medical encounter

- 5.1. Maintain clear, concise, accurate and appropriate records (written and electronic) of clinical encounters and plans
- 5.2. Present verbal reports of clinical encounters and plans
- 5.3. Present medical information to the public or media about a medical issue

#### Collaborator

#### Definition:

As Collaborators, Internists effectively work within a health care team to achieve optimal patient care.

Key and Enabling Competencies: Internists are able to proficiently...

# 1. Participate effectively and appropriately in an inter-professional health care team

- 1.1. Describe the Internist's roles and responsibilities to other professionals
- 1.2. Describe the roles and responsibilities of other professionals within the health care team
- 1.3. Recognize and respect the diversity of roles, responsibilities and competences of other professionals in relation to their own.
- 1.4. Work with others to assess, plan, provide and integrate care for individual patients (or groups of patients)

- 1.4.1. Incorporate understanding of the interactions of diseases involving multiple organ systems in the creation of multidisciplinary diagnostic and management strategies
- 1.4.2. Work with interprofessional teams to provide palliative care
- 1.5. Work with others to assess, plan, provide and review other tasks, such as research problems, educational work, program review or administrative responsibilities
- 1.6. Participate effectively in inter-professional team meetings
- 1.7. Enter into interdependent relationships with other professions for the provision of quality care
- 1.8. Describe the principles of team dynamics
- 1.9. Respect team ethics, including confidentiality, resource allocation and professionalism
- 1.10. Demonstrate leadership in a health care team, as appropriate
- 1.11. Respond to an emergency in a positive, organized and effective manner, including demonstrating the ability to direct an emergency team, and to prioritize tasks in the resuscitation
- 1.12. Work within inter-professional teams to optimize both patient safety and quality of care

# 2. Work with other health professionals effectively to prevent, negotiate, and resolve interprofessional conflict

- 2.1. Demonstrate a respectful attitude towards other colleagues and members of an interprofessional team
- 2.2. Work with other professionals to prevent conflicts
- 2.3. Employ collaborative negotiation to resolve conflicts
- 2.4. Respect differences and address misunderstandings and limitations in other professionals
- 2.5. Recognize one's own differences, misunderstanding and limitations that may contribute to interprofessional tension
- 2.6. Reflect on interprofessional team function

#### Manager

### Definition:

As Managers, Internists are integral participants in health care organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the health care system.

Key and Enabling Competencies: At the end of the program, residents are able to proficiently...

# 1. Participate in activities that contribute to the effectiveness of their health care organizations and systems

- 1.1. Work collaboratively with others in their organizations
- 1.2. Participate in systemic quality process evaluation and improvement, such as patient safety initiatives
  - 1.2.1. Anticipate, recognize and manage situations that place patients at risk
  - 1.2.2. Recognize the occurrence of an adverse event or close call and respond effectively to mitigate harm to the patient, ensure disclosure and prevent recurrence
- 1.3. Describe the structure and function of the health care system as it relates to Internal Medicine, including the roles of physicians
- 1.4. Describe principles of health care financing, including physician remuneration, budgeting and organizational funding

#### 2. Manage their practice and career effectively

- 2.1. Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life
- 2.2. Manage a practice including finances and human resources
- 2.3. Implement processes to ensure personal practice improvement
- 2.4. Employ information technology appropriately for patient care

## 3. Allocate finite health care resources appropriately

- 3.1. Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency and access with optimal patient care
- 3.2. Apply evidence and management processes for cost-appropriate care

#### 4. Serve in administration and leadership roles

- 4.1. Chair or participate effectively in committees and meetings
- 4.2. Lead or implement change in health care
- 4.3. Plan relevant elements of health care delivery (e.g., work schedules)

#### Health Advocate

#### Definition:

As Health Advocates, Internists responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

### Key and Enabling Competencies: Internists are able to proficiently...

### 1. Respond to individual patient health needs and issues as part of patient care

- 1.1. Identify the health needs of an individual patient
- 1.2. Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care

#### 2. Respond to the health needs of the communities that they serve

- 2.1. Describe the practice communities that they serve
- 2.2. Identify opportunities for advocacy, health promotion and disease prevention in the communities that they serve, and respond appropriately
- 2.3. Appreciate the possibility of competing interests between the communities served and other populations

#### 3. Identify the determinants of health for the populations that they serve

- 3.1. Identify the determinants of health of the populations, including barriers to access to care and resources
- 3.2. Identify vulnerable or marginalized populations within those served and respond appropriately

### 4. Promote the health of individual patients, communities, and populations

- 4.1. Describe an approach to implementing a change in a determinant of health of the populations they serve
- 4.2. Describe how public policy impacts on the health of the populations served
- 4.3. Identify points of influence in the health care system and its structure
- 4.4. Describe the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism
- 4.5. Appreciate the possibility of conflict inherent in their role as a health advocate for a patient or community with that of manager or gatekeeper
- 4.6. Describe the role of the medical profession in advocating collectively for health and patient safety

#### **Scholar**

#### Definition:

As Scholars, Internists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

### Key and Enabling Competencies: Internists are able to ...

### 1. Maintain and enhance professional activities through ongoing learning

- 1.1. Describe the principles of maintenance of competence
- 1.2. Describe the principles and strategies for implementing a personal knowledge management system
- 1.3. Recognize and reflect on learning issues in practice
- 1.4. Conduct a personal practice audit
- 1.5. Pose an appropriate learning question
- 1.6. Access and interpret the relevant evidence
- 1.7. Integrate new learning into practice
- 1.8. Evaluate the impact of any change in practice
- 1.9. Document the learning process

# 2. Critically evaluate medical information and its sources, and apply this appropriately to practice decisions

- 2.1. Describe the principles of critical appraisal
- 2.2. Critically appraise retrieved evidence in order to address a clinical question
- 2.3. Integrate critical appraisal conclusions into clinical care

# 3. Facilitate the learning of patients, families, students, residents, other health professionals, the public and others

- 3.1. Describe principles of learning relevant to medical education
- 3.2. Identify collaboratively the learning needs and desired learning outcomes of others
- 3.3. Select effective teaching strategies and content to facilitate others' learning
- 3.4. Demonstrate an effective lecture or presentation
- 3.5. Assess and reflect on a teaching encounter
- 3.6. Provide effective feedback
- 3.7. Describe the principles of ethics with respect to teaching

# 4. Contribute to the development, dissemination, and translation of new knowledge and practices

- 4.1. Describe the principles of research and scholarly inquiry
- 4.2. Describe the principles of research ethics
- 4.3. Pose a scholarly question
- 4.4. Conduct a systematic search for evidence
- 4.5. Select and apply appropriate methods to address the question
- 4.6. Disseminate the findings of a study
- 4.7. Participate in a scholarly project/activity in Internal Medicine

#### **Professional**

#### Definition:

As Professionals, Internists are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behavior.

# Key and Enabling Competencies: Internists are able to ...

# 1. Demonstrate a commitment to their patients, profession, and society through ethical practice

- 1.1. Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
- 1.2. Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 1.3. Recognize and appropriately respond to ethical issues encountered in practice
- 1.4. Manage conflicts of interest
- 1.5. Incorporate an ethical framework for appropriate interventions in patients with life threatening disease, including truth telling, consent, treatment choice, the question of euthanasia, advanced directives and boundaries of palliative care.
- 1.6. Recognize the principles and limits of patient confidentiality as defined by professional practice standards and the law
- 1.7. Maintain appropriate relations with patients

# 2. Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation

- 2.1. Demonstrate knowledge and an understanding of the professional, legal and ethical codes of practice
- 2.2. Fulfill the regulatory and legal obligations required of current practice

- 2.3. Demonstrate accountability to professional regulatory bodies
- 2.4. Recognize and respond to others' unprofessional behaviours in practice
- 2.5. Participate in peer review

# 3. Demonstrate a commitment to physician health and sustainable practice

- 3.1. Balance personal and professional priorities to ensure personal health and a sustainable practice
- 3.2. Strive to heighten personal and professional awareness and insight
- 3.3. Recognize other professionals in need and respond appropriately