

Infectious Diseases Competencies

VERSION 2.0

Effective for residents who enter training on or after July 1, 2025.

DEFINITION

Infectious Diseases is a subspecialty of internal medicine and pediatrics concerned with the prevention, investigation, diagnosis, and management of human illness caused by any infectious agent.

INFECTIOUS DISEASES PRACTICE

Infectious diseases physicians provide care for patients with suspected or confirmed infectious disease syndromes that pose diagnostic or management challenges or have broader implications on population and public health. This includes patients with acute and chronic infections complicated by factors related to the pathogen, patient, family, community, environment, or proposed treatment. Infectious diseases physicians also provide care for individuals with increased likelihood of infection due to exposures or inherited or acquired errors of immunity (e.g., primary or secondary immunodeficiency). The patient populations served by infectious diseases physicians may face stigmatization because of their illness and the factors that predispose them to infection.

Infectious diseases physicians provide inpatient and outpatient consultations for the prevention, investigation, diagnosis, management, and control of suspected and confirmed infectious diseases, and infectious disease syndromes. They advise and support other clinicians in the selection, prioritization, and utilization of microbiology tests, collection of specimens, and interpretation of results. Infectious diseases physicians provide longitudinal care for patients with altered immunity and for patients with chronic infectious diseases. They also provide counselling and preventive care, such as immunization and prophylaxis.

Infectious diseases physicians incorporate the principles of infection prevention and control (IPAC) and antimicrobial stewardship (AMS) at different levels: the individual patient and family, the health care setting, the community, and for populations. They provide consultation in IPAC and AMS in response to clinical questions and serve as members of interprofessional IPAC and AMS teams in the health care setting. They also provide consultation and advice on policy, within and beyond the hospital setting, for questions related to occupational, public, and planetary health. They provide education to the public on matters related to IPAC, population and public health aspects of infectious diseases, vaccination, and antimicrobial utilization.

Infectious diseases physicians work in academic health centres and community hospitals with

 $^{^{1}}$ Throughout this document, references to the patient's family are intended to include all those who are personally significant to the patient and are concerned with their care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardians, and substitute decision-makers.

a regional referral base. They work in inpatient settings and clinics. Infectious diseases physicians work as consultants in government health agencies and in private industry.

Infectious diseases physicians work closely with referring clinicians, medical and clinical microbiologists, laboratory staff, members of the health care facility administration engaged in IPAC and AMS, and public health organizations. They work with non-profit organizations. They work in interprofessional teams.

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING (Adult stream)

The following requirements apply to those who began training in Internal Medicine **prior to July 1, 2023**.

Royal College certification in Internal Medicine

OR

Eligibility for the Royal College examination in Internal Medicine

OR

Registration in a Royal College accredited residency program in Internal Medicine²

A maximum of one year of training may be undertaken during training for certification in Internal Medicine.

The following requirements apply to those who began training in Internal Medicine on or after July 1, 2023.

Royal College certification in Internal Medicine

OR

Successful completion of the Core stage of training in a Royal College accredited residency program in Internal Medicine³

Training in Infectious Diseases may overlap with completion of requirements for certification in Internal Medicine.⁴

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING (Pediatric stream)

Royal College certification in Pediatrics

OR

Successful completion of the Transition to Practice stage of training in a Royal College accredited residency program in Pediatrics.⁵

² See the standards for Internal Medicine on the "Information by Discipline" page of the Royal College website.

³ Ibid.

⁴ See information about Overlap Training and Alternative Pathway to Internal Medicine certification in the *Internal Medicine Training Experiences* document on the "Information by Discipline" page of the Royal College website. ⁵ Some programs in Quebec may permit eligible trainees to begin subspecialty training before completion of the Pediatrics Transition to Practice stage. However, as with all jurisdictions, trainees in Quebec must achieve all

Pediatrics Transition to Practice stage. However, as with all jurisdictions, trainees in Quebec must achieve all generalist competencies of the Pediatrics specialty prior to certification in Pediatrics. To learn more about the entrance requirements for a specific Infectious Diseases program, speak to the relevant postgraduate medical education office.

ELIGIBILITY REQUIREMENTS FOR EXAMINATION⁶

All candidates must be Royal College certified in Internal Medicine or Pediatrics in order to be eligible for the Royal College examination in Infectious Diseases.

INFECTIOUS DISEASES COMPETENCIES

Medical Expert

Definition:

As *Medical Experts*, infectious diseases physicians integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional values in their provision of high-quality and safe patient-centred care. Medical Expert is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Practise medicine within their defined scope of practice and expertise

- 1.1. Demonstrate a commitment to high-quality care of their patients
- 1.2. Integrate the CanMEDS Intrinsic Roles into their practice of Infectious Diseases
- 1.3. Apply knowledge of the clinical and biomedical sciences relevant to Infectious Diseases

Infectious agents

- 1.3.1. Taxonomy, structure, life cycle, virulence factors, pathogenesis, and antimicrobial susceptibility of microorganisms that cause human disease
- 1.3.2. Structure and pathogenesis of proteinaceous infectious particles (prions)

Immunology

- 1.3.3. Concepts of innate and adaptive immunity
- 1.3.4. Host immune response to pathogens
- 1.3.5. Host responses leading to susceptibility to infectious diseases and immune dysregulation, including abnormal inflammation
- 1.3.6. Immunological evaluation of the patient with recurrent, severe, atypical, or opportunistic infections
- 1.3.7. Effects of therapies that selectively target specific components of the host immune response

⁶ These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.

Clinical microbiology

- 1.3.8. Specimen selection, collection, and transportation for the diagnosis of bacterial, viral, fungal, parasitic, and prion infections
- 1.3.9. Quality assessment of specimens
- 1.3.10. Principles of the performance and interpretation of laboratory tests, including
 - 1.3.10.1. Pre- and post-test probability, sensitivity and specificity
 - 1.3.10.2. Methods for isolation and identification of microorganisms, including molecular methods
 - 1.3.10.3. Antimicrobial susceptibility testing
 - 1.3.10.4. Serology for infectious agents
- 1.3.11. Role of the microbiology laboratory in IPAC and AMS, including surveillance
- 1.3.12. Laboratory reporting requirements to public health

Acute and chronic infectious diseases

- 1.3.13. Etiology, epidemiology, prevention, pathology, pathogenesis, natural history, clinical features, and management of
 - 1.3.13.1. Common organ-based infections and syndromes
 - 1.3.13.1.1. Bloodstream
 - 1.3.13.1.2. Cardiac
 - 1.3.13.1.3. Gastrointestinal, hepatobiliary, and other intra-abdominal
 - 1.3.13.1.4. Genitourinary
 - 1.3.13.1.5. Head and neck, including orbital
 - 1.3.13.1.6. Musculoskeletal
 - 1.3.13.1.7. Nervous system
 - 1.3.13.1.8. Respiratory
 - 1.3.13.1.9. Skin and soft tissue
 - 1.3.13.2. Infectious diseases caused by specific pathogens
 - 1.3.13.2.1. Bacteria, including mycobacteria
 - 1.3.13.2.2. Viruses
 - 1.3.13.2.3. Fungi
 - 1.3.13.2.4. Parasites
 - 1.3.13.2.5. Prions
 - 1.3.13.3. Infectious diseases in special hosts or specific populations, including
 - 1.3.13.3.1. Patients with inherited or acquired errors of immunity

- 1.3.13.3.2. Patients with underlying conditions predisposing to chronic, severe, or recurrent infections
- 1.3.13.3.3. Patients with increased likelihood of health care-associated infections, including those requiring admission to critical care units
- 1.3.13.3.4. Travellers, immigrants, migrants, and refugees
- 1.3.13.3.5. Patients with behaviours or exposures that place them at increased likelihood of infection
- 1.3.13.3.6. Patients who are pregnant
- 1.3.13.3.7. Patients who are at the extremes of age
- 1.3.13.4. Infectious diseases associated with
 - 1.3.13.4.1. Emerging pathogens
 - 1.3.13.4.2. Zoonoses
 - 1.3.13.4.3. Climate change
 - 1.3.13.4.4. Bioterrorism

Complex or undifferentiated presentations with infection in the differential diagnosis

- 1.3.14. Clinical and laboratory approach to diagnosis and management of fever syndromes
 - 1.3.14.1. Acute febrile illness
 - 1.3.14.2. Fever and skin eruption
 - 1.3.14.3. Fever in the immunocompromised patient
 - 1.3.14.4. Fever of unknown origin
 - 1.3.14.5. Periodic fever
 - 1.3.14.6. Recurrent or relapsing fever
- 1.3.15. Clinical features and principles of diagnosis and management of
 - 1.3.15.1. Sepsis
 - 1.3.15.2. Multiple organ dysfunction syndrome
 - 1.3.15.3. Post-infectious syndromes, including rheumatic fever
- 1.3.16. Role of medical imaging in the investigation of infectious diseases and infectious diseases syndromes

Immunization

1.3.17. Passive and active immunization, including different populations, novel vaccines, immunoglobulins, and new vaccination strategies

- 1.3.18. Types of vaccines, including
 - 1.3.18.1. Inactivated
 - 1.3.18.2. Live-attenuated
 - 1.3.18.3. Messenger ribonucleic acid (mRNA)
 - 1.3.18.4. Subunit, recombinant, polysaccharide, and conjugate
- 1.3.19. Indications for, contraindications to, efficacy, effectiveness, and adverse effects of, and misconceptions regarding licensed vaccines
- 1.3.20. Immunization guidelines and policies
- 1.3.21. Evaluation and reporting of adverse events following immunization

Antimicrobial agents and other treatments

- 1.3.22. Classification of licensed antimicrobial agents
- 1.3.23. Mechanisms of action of and resistance to antimicrobial agents
- 1.3.24. Pharmacokinetics and pharmacodynamics of antimicrobial agents in normal and diseased states
- 1.3.25. Indications for, contraindications to, and use of the following in the treatment of infection
 - 1.3.25.1. Antimicrobial agents
 - 1.3.25.2. Antitoxins
 - 1.3.25.3. Immune modulators
 - 1.3.25.4. Monoclonal antibodies
 - 1.3.25.5. Immune globulin
 - 1.3.25.6. Microbiome transplant
 - 1.3.25.7. Phage therapy
- 1.3.26. Indications for, contraindications to, and use of the following methods of delivering antimicrobial therapy
 - 1.3.26.1. Directly observed therapy
 - 1.3.26.2. Outpatient parenteral antibiotic therapy (OPAT)
- 1.3.27. Prevention, recognition, and management of antimicrobial toxicities and drug-drug interactions
- 1.3.28. Principles and indications for chemoprophylaxis
- 1.3.29. Routes for accessing medication, including the process of acquiring antimicrobial agents through Health Canada's Special Access Program (SAP)

Antimicrobial stewardship (AMS)

- 1.3.30. Epidemiology of antimicrobial resistance
- 1.3.31. Implications of antimicrobial resistance at patient, health care setting, community, and global levels
- 1.3.32. Principles of AMS in the clinical setting
- 1.3.33. Organization, implementation, and evaluation of AMS programs
 - 1.3.33.1. Behavioural and system-based strategies to promote judicious use of antimicrobials
 - 1.3.33.2. Components and benefits of AMS programs
 - 1.3.33.3. Metrics for evaluation of an AMS program

Infection prevention and control (IPAC)

- 1.3.34. Principles of routine practice and additional precautions
 - 1.3.34.1. Hierarchy of controls, including indications for use of personal protective equipment (PPE) and procedures for donning and doffing
- 1.3.35. Principles and practice of environmental cleaning, disinfection, and sterilization
- 1.3.36. Strategies to prevent health care-associated infections
- 1.3.37. Prevention and control of communicable infections in institutional settings
- 1.3.38. Outbreak investigation and management
- 1.3.39. Laboratory methods to support IPAC activities
- 1.3.40. Surveillance methods, including active, passive, and syndromic
- 1.3.41. Infectious diseases pertinent to occupational health, safety, and wellness (OHSW)

Public health

- 1.3.42. Infections and infectious syndromes of public health importance
- 1.3.43. Public health management of communicable infections and outbreaks, including surveillance, reporting, isolation, quarantine, prophylaxis, and environmental control
- 1.3.44. Roles and responsibilities of local, provincial, territorial, and federal public health professionals and agencies
- 1.3.45. Emergency preparedness and response
- 1.4. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner
- 1.5. Carry out professional duties in the face of multiple competing demands
- 1.6. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in practice

2. Perform a patient-centred clinical assessment and establish a management plan

- 2.1. Prioritize issues to be addressed in a patient encounter
 - 2.1.1. Determine and prioritize the questions to be addressed in a consultation
 - 2.1.2. Recognize infections that represent a medical emergency and respond appropriately
- 2.2. Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
 - 2.2.1. Elicit a history that is relevant, concise, and accurate, including
 - 2.2.1.1. Factors that predispose the patient to infectious diseases, including sociodemographics, institutionalization, travel, work, and personal behaviours and exposures
 - 2.2.1.2. Indicators that suggest altered immunity, including family history
 - 2.2.1.3. Indicators that suggest infection with antimicrobial-resistant microorganisms
 - 2.2.1.4. Immunization status
 - 2.2.1.5. Antimicrobial allergy status
 - 2.2.1.6. Factors that impact an individual's access to health care and other resources
 - 2.2.2. Perform a physical exam relevant to the presentation and suspected predisposing factors and exposures
 - 2.2.3. Develop a differential diagnosis
 - 2.2.3.1. Propose alternative etiologies for illnesses mimicking infectious disease
 - 2.2.4. Select investigations and interpret results, including
 - 2.2.4.1. Microbiological tests most appropriate for the specific infection(s) under consideration
 - 2.2.4.2. Immunological tests
 - 2.2.4.3. Histopathology
 - 2.2.4.4. Medical imaging
- 2.3. Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation
- 2.4. Establish a patient-centred management plan
- 3. Plan and provide interventions and therapies for the purpose of management
 - 3.1. Determine the most appropriate procedures or therapies

- 3.1.1. Antimicrobial agents
- 3.1.2. Antitoxins
- 3.1.3. Immune globulin
- 3.1.4. Immune modulators
- 3.1.5. Monoclonal antibodies
- 3.1.6. Phage therapy
- 3.1.7. Source control
- 3.1.8. Chemoprophylaxis
- 3.1.9. Immunization
- 3.1.10. Microbiome transplant
- 3.2. Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy
 - 3.2.1. Provide information to patients and families about adverse effects and complications of treatment
 - 3.2.2. Provide information to patients and families on the role of immunizations in the prevention of diseases, including the role of herd immunity
- 3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources
- 3.4. Provide management in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances
 - 3.4.1. Prescribe antimicrobial agents in a safe and effective manner, considering their positive and negative effects in individual patients and the community in general
 - 3.4.2. Recommend other interventions to treat or prevent infections and their sequelae
 - 3.4.2.1. Prescribe chemoprophylaxis
 - 3.4.2.2. Apply harm reduction strategies for individuals with increased likelihood of infection
 - 3.4.3. Implement IPAC to prevent transmission of communicable infectious diseases
 - 3.4.4. Identify outbreaks and perform outbreak investigations

4. Establish plans for ongoing care and, when appropriate, timely consultation

- 4.1. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation
 - 4.1.1. Monitor for, diagnose, and treat short- and long-term complications of infections and their treatments, including superinfections

4.1.2. Prevent, recognize, and manage antimicrobial toxicities and drug interactions

5. Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

- 5.1. Recognize and respond to harm from health care delivery, including patient safety incidents
- 5.2. Adopt strategies that promote patient safety and address human and system factors
 - 5.2.1. Perform risk assessments to determine need for additional precautions
 - 5.2.2. Promote hand hygiene and correct use of PPE
 - 5.2.3. Apply safe practices relevant to specimen collection and handling

Communicator

Definition:

As *Communicators*, infectious diseases physicians form relationships with patients and their families that facilitate the gathering and sharing of essential information for effective health care.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Establish professional therapeutic relationships with patients and their families

- 1.1. Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion
 - 1.1.1. Demonstrate cultural humility
 - 1.1.2. Establish trust and rapport with patients and family who are
 - 1.1.2.1. Stigmatized because of their infection or the factors that predispose them to infection
 - 1.1.2.2. Embarrassed by or ashamed of a new diagnosis of an infection that is chronic, potentially stigmatizing, or contagious to others
- 1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety
 - 1.2.1. Recognize that patients with an infection may feel vulnerable in terms of confidentiality, privacy, and autonomy
- 1.3. Recognize when the perspectives, values, or biases of patients, patients' families, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly

- 1.3.1. Demonstrate a non-judgmental attitude
- 1.4. Respond to a patient's non-verbal behaviours to enhance communication
- 1.5. Manage disagreements and emotionally charged conversations
 - 1.5.1. Use strategies to engage patients and families who appear reluctant or ambivalent
 - 1.5.2. Use strategies to discuss possible misconceptions regarding medical care
 - 1.5.3. Use strategies to address confrontational behaviour
- 1.6. Adapt to the unique needs and preferences of each patient and to the patient's clinical condition and circumstances
 - 1.6.1. Apply knowledge of the health and illness beliefs of individuals from other ethnocultural backgrounds
 - 1.6.2. Seek out information about cultural beliefs that may impact the patient's health from resources, such as cultural associations and support agencies

2. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families

- 2.1. Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information
 - 2.1.1. Apply a trauma-informed approach to clinical assessment
 - 2.1.2. Demonstrate an understanding of the terminology that patients may use to describe personal practices and behaviours
 - 2.1.3. Explore issues that may be sensitive to patients, such as sexual practices or use of substances, in a skilful and caring manner
- 2.2. Provide a clear structure for and manage the flow of an entire patient encounter
- 2.3. Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent

3. Share health care information and plans with patients and their families

- 3.1. Share information and explanations that are clear, accurate, and timely, while assessing for patient and family understanding
 - 3.1.1. Use developmentally appropriate language and avoid medical jargon
 - 3.1.2. Educate patient and families about the role of appropriate antimicrobial use in contributing to a good therapeutic outcome and decreasing the occurrence of antimicrobial resistance
 - 3.1.3. Provide information about the legal requirements for physicians to divulge personal patient information, such as a communicable infection

- 3.1.4. Provide information about the need for partner notification if there is a risk of transmission, including the requirement for human immunodeficiency virus (HIV) disclosure and the potential legal consequences of non-disclosure
- 3.2. Disclose harmful patient safety incidents to patients and their families

4. Engage patients and their families in developing plans that reflect the patient's health care needs and goals

- 4.1. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe
- 4.2. Assist patients and their families to identify, access, and make use of information and communication technologies to support their care and manage their health
- 4.3. Use communication skills and strategies that help patients and their families make informed decisions regarding their health
 - 4.3.1. Recognize that patient and family understanding and involvement are crucial to effective adherence to the management plan
 - 4.3.2. Recognize that equity-seeking individuals may feel disempowered and require additional support, such as social workers or patient advocates, to assist them in shared decision-making

5. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy

- 5.1. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements
 - 5.1.1. Prepare well-organized consultation notes, providing clear direction to the referring physicians and other health professionals
 - 5.1.2. Provide well-organized and legible orders and progress notes in the medical record
- 5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology
- 5.3. Share information with patients, families, and others in a manner that enhances understanding and that respects patient privacy and confidentiality

Collaborator

Definition:

As *Collaborators*, infectious diseases physicians work effectively with other health care professionals to provide safe, high-quality, patient-centred care.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Work effectively with physicians and other colleagues in the health care professions

- 1.1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care
- 1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
 - 1.2.1. Work effectively as a member of an interprofessional patient care team in inpatient and outpatient settings
 - 1.2.2. Exchange information with colleagues and other health care professionals in an effective manner to ensure consistent messages are delivered to patients and families
- 1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
 - 1.3.1. Work effectively with health care professionals and other care providers in both the hospital and community settings
 - 1.3.2. Convey information from the clinical assessment in a manner that enhances patient care
 - 1.3.2.1. Encourage discussion, questions, and interaction relevant to the case
 - 1.3.3. Synthesize, present, and discuss cases effectively at multidisciplinary rounds

2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts

- 2.1. Show respect toward collaborators
- 2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture

3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care

- 3.1. Determine when care should be transferred to another physician or health care professional
- 3.2. Demonstrate safe handover of care, using both oral and written communication, during a patient transition to a different health care professional, setting, or stage of care
 - 3.2.1. Provide continuity of care in patient transitions from the inpatient to outpatient care setting

Leader

Definition:

As *Leaders*, infectious diseases physicians engage with others to contribute to a vision of a high-quality health care system and take responsibility for the delivery of excellent patient care through their activities as clinicians, administrators, scholars, or teachers.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Contribute to the improvement of health care delivery in teams, organizations, and systems

- 1.1. Apply the science of quality improvement to systems of patient care
 - 1.1.1. Undertake audits, in collaboration with other health care personnel, related to such areas as health care-associated infections and antimicrobial use
- 1.2. Contribute to a culture that promotes patient safety
- 1.3. Analyze patient safety incidents to enhance systems of care
 - 1.3.1. Participate in critical incident and near-miss audit and response activities
- 1.4. Use health informatics to improve the quality of patient care and optimize patient safety

2. Engage in the stewardship of health care resources

- 2.1. Allocate health care resources for optimal patient care
- 2.2. Apply evidence and management processes to achieve cost-appropriate care

3. Demonstrate leadership in health care systems

- 3.1. Demonstrate leadership skills to enhance health care
 - 3.1.1. Advise other health care professionals and organizations at local, regional, provincial, territorial, national, or international levels regarding
 - 3.1.1.1. IPAC activities
 - 3.1.1.2. AMS recommendations and strategies
 - 3.1.1.3. Selection of antimicrobial agents for the hospital formulary through participation in pharmacy and therapeutics committees
 - 3.1.1.4. OHSW issues related to infection in the health care setting
 - 3.1.1.5. Immunization recommendations and strategies
 - 3.1.1.6. Planning for infectious disease emergencies, such as pandemics, natural disasters, emerging pathogens, and bioterrorism events
- 3.2. Facilitate change in health care to enhance services and outcomes

4. Manage career planning, finances, and health human resources in personal practice(s)

- 4.1. Set priorities and manage time to integrate practice and personal life
- 4.2. Manage personal professional practice(s) and career
- 4.3. Implement processes to ensure personal practice improvement

Health Advocate

Definition:

As *Health Advocates*, infectious diseases physicians contribute their expertise and influence as they work with communities or patient populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment

- 1.1. Work with patients and families to address determinants of health that affect them and their access to needed health services or resources
 - 1.1.1. Recognize the effect on a patient and the patient's health of such factors as age, gender, sex, sexual practices, ethnocultural experience, systemic racism, social support, alternative health care practices, substance use, financial status, education, and emotional responses
 - 1.1.2. Facilitate patient access to needed service(s) and resources
- 1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours
 - 1.2.1. Identify behaviours and circumstances that place patients at increased likelihood for adverse health outcomes, and recommend strategies to reduce those risks
- 1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
 - 1.3.1. Promote an evidence-based approach to infection prevention and management, including building trust, while providing education regarding immunization and pitfalls of unproven therapies
 - 1.3.2. Recognize and respond to misconceptions that a patient may have about immunization

2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner

- 2.1. Work with a community or population to identify the determinants of health that affect its members
 - 2.1.1. Demonstrate knowledge of the importance of incorporating the perspectives and concerns of equity-seeking populations into the development and implementation of infectious diseases services delivery
 - 2.1.2. Demonstrate knowledge of policies, programs, and interventions that can affect health, either positively or negatively, such as childhood immunization, isolation and quarantine, antimicrobial restrictions, harm reduction programs, drug coverage programs, housing, and mental health
- 2.2. Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities
- 2.3. Contribute to a process to improve health in the community or population they serve
 - 2.3.1. Apply IPAC practices and knowledge to prevent diseases and investigate outbreaks of infectious illnesses
 - 2.3.2. Identify initiatives and programs to reduce community infections, including programs for immunization, screening, and harm reduction
 - 2.3.3. Serve on committees or working groups relevant to the discipline
 - 2.3.4. Advocate for the use of AMS to reduce emergence and spread of antimicrobial resistant microorganisms

Scholar

Definition:

As *Scholars*, infectious diseases physicians demonstrate a lifelong commitment to excellence in practice through continuous learning, and by teaching others, evaluating evidence, and contributing to scholarship.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Engage in the continuous enhancement of their professional activities through ongoing learning

- 1.1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
- 1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources
- 1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice

2. Teach students, residents, the public, and other health care professionals

- 2.1. Recognize the influence of role modelling and the impact of the formal, informal, and hidden curriculum on learners
- 2.2. Promote a safe and respectful learning environment
- 2.3. Ensure patient safety is maintained when learners are involved
- 2.4. Plan and deliver learning activities
- 2.5. Provide feedback to enhance learning and performance
- 2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

3. Integrate best available evidence into practice

- 3.1. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that can address them
- 3.2. Identify, select, and navigate pre-appraised resources
- 3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature
- 3.4. Integrate evidence into decision-making in their practice

4. Contribute to the creation and dissemination of knowledge and practices applicable to health

- 4.1. Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care
- 4.2. Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations
- 4.3. Contribute to the work of a research program
- 4.4. Pose questions amenable to scholarly investigation and select appropriate methods to address them
- 4.5. Summarize and communicate to professional and lay audiences, including patients and families, the findings of relevant research and scholarly inquiry
 - 4.5.1. Contribute to the development of information tools for patients and the public
 - 4.5.2. Convey information in a manner that is accurate, easily understood, and works to prevent the spread of misinformation related to infection prevention and management

Professional

Definition:

As *Professionals*, infectious diseases physicians are committed to the health and well-being of individual patients and society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.

Key and Enabling Competencies: Infectious diseases physicians are able to...

1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards

- 1.1. Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
- 1.2. Demonstrate a commitment to excellence in all aspects of practice
- 1.3. Recognize and respond to ethical issues encountered in practice, including
 - 1.3.1. Limits of privacy and confidentiality
 - 1.3.2. The conflict between individual autonomy and liberty and measures to prevent and control the spread of infection, such as isolation and quarantine
- 1.4. Recognize and manage conflicts of interest
 - 1.4.1. Recognize the potential for conflicts of interest related to interactions with manufacturers or distributors of antimicrobial agents, vaccines, diagnostics, and devices and equipment
- 1.5. Exhibit professional behaviours in the use of technology-enabled communication

2. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care

- 2.1. Demonstrate accountability to patients, society, and the profession by responding to societal expectations of physicians
- 2.2. Demonstrate a commitment to patient safety and quality improvement

3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation

- 3.1. Fulfil and adhere to professional and ethical codes, standards of practice, and laws governing practice
 - 3.1.1. Adhere to requirements for mandatory reporting, including diseases of public health significance and suspected child maltreatment and elder abuse

- 3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions
- 3.3. Participate in peer assessment and standard setting

4. Demonstrate a commitment to physician health and well-being to foster optimal patient care

- 4.1. Exhibit self-awareness and manage influences on personal well-being and professional performance
- 4.2. Manage personal and professional demands for a sustainable practice throughout the physician life cycle
- 4.3. Promote a culture that recognizes, supports, and responds effectively to colleagues in need

This document is to be reviewed by the Specialty Committee in Infectious Diseases by December 31, 2027.

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