

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

DEFINITION

Gastroenterology is the medical subspecialty of Internal Medicine and Pediatrics that deals with the investigation, diagnosis, and management of conditions affecting the digestive system, including the liver and pancreas. The subspecialty can be further defined by and separated into pediatric and adult streams based on differences in clinical conditions and procedures that require stream-specific knowledge and skills. There is overlap in some aspects of the two streams in the care of adolescent patients transitioning to adult gastroenterology care.

GASTROENTEROLOGY PRACTICE

Gastroenterologists provide care for patients with a wide range of conditions affecting the digestive system.¹ Common patient presentations include abdominal pain, constipation, diarrhea, difficulty swallowing, gastrointestinal bleeding, indigestion, liver dysfunction, and suspected cancer of the digestive system.

Gastroenterologists provide consultation for emergency, urgent, and non-urgent patient presentations, perform diagnostic and therapeutic gastrointestinal endoscopic procedures, and provide acute and long-term medical management and surveillance of the patient's condition.

The evolution in gastroenterology care has led to specialization within the discipline, with some gastroenterologists undergoing advanced training and focusing their practice in areas such as hepatology, liver transplantation, inflammatory bowel disease, gastrointestinal motility, intestinal failure, pancreaticobiliary conditions, and advanced endoscopic interventions.

¹ For the purposes of this document, the digestive system includes the gastrointestinal tract, liver, and pancreas.

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 in Gastroenterology may be undertaken at the fourth-year residency level during concurrent 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 Adult Gastroenterology 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 Pediatrics⁵

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 generalist competencies of the Pediatrics specialty prior to certification in Pediatrics. To learn more about the entrance requirements for a specific Gastroenterology 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 to write the Royal College examination in Gastroenterology (adult or pediatric).

GASTROENTEROLOGY COMPETENCIES⁷

Medical Expert

Definition:

As *Medical Experts*, Gastroenterologists 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: Gastroenterologists are able to...

1. Practice 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 Gastroenterology
- 1.3. Apply knowledge of the clinical and biomedical sciences relevant to Gastroenterology
 - 1.3.1. Anatomy, embryology, physiology, and pathology of the digestive system
 - 1.3.2. Principles of biochemistry, molecular biology, microbiology, immunology, and genetics as they apply to the digestive system
 - 1.3.3. Principles of nutritional assessment and prescription
 - 1.3.4. Principles of neurogastroenterology and gastrointestinal motility, including functional conditions
 - 1.3.5. Principles of pharmacokinetics, pharmacodynamics, and toxicity of therapies commonly used in Gastroenterology
 - 1.3.6. Epidemiology, pathophysiology, methods of diagnosis, management, natural history, and prognosis of conditions affecting the digestive system
 - 1.3.7. Indications, contraindications, interpretations, limitations, and complications of diagnostic and therapeutic procedures performed on the digestive system
 - 1.3.8. Potential risks and complications of endoscopic procedures for patient, operator, and assistant, and the measures appropriate to minimize such risks
 - 1.3.9. Principles of medical imaging modalities and their application in gastroenterology practice, including

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

⁷ Unless otherwise indicated, competencies apply to both adult and pediatric training streams.

- 1.3.9.1. Principles of fluoroscopy used during endoscopic procedures, including how to use fluoroscopy in a manner that protects the safety of the patient, operator, and others present
- 1.3.10. Principles of surgery of the digestive system, including indications, procedures, and complications
- 1.3.11. Advances in methods used for management of digestive system conditions, including
 - 1.3.11.1. Organ transplantation
 - 1.3.11.2. Advanced endoscopy
 - 1.3.11.3. Immune modulators
- 1.3.12. Principles of sedation and infection prevention and control, as relevant to the endoscopy suite
- 1.3.13. The role and potential application of artificial intelligence (AI) in Gastroenterology
- 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 gastroenterology 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. Recognize, assess, and manage patients with gastrointestinal emergencies, including
 - 2.1.1.1. Acute gastrointestinal hemorrhage
 - 2.1.1.2. Acute abdominal pain
 - 2.1.1.3. Fulminant colitis
 - 2.1.1.4. Biliary obstruction, including ascending cholangitis
 - 2.1.1.5. Acute liver failure
 - 2.1.1.6. Foreign body and caustic ingestion
- 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 and perform a physical exam appropriate to the presentation

2.2.2. Select and interpret results of investigations

2.2.2.1. Imaging of the digestive system, including

- contrast studies
- ultrasound
- point-of-care ultrasound (POCUS)
- computed tomography (CT)
- magnetic resonance imaging (MRI)
- nuclear imaging
- endoscopic retrograde cholangiopancreatography (ERCP)
- endoscopic ultrasound
- capsule endoscopy
- deep enteroscopy
- elastography

2.2.2.2. Commonly employed gastrointestinal function tests, including breath tests and motility studies

2.2.2.3. Histologic findings of tissue biopsies of the digestive system

2.2.2.4. Gastrointestinal endoscopic procedures

2.3. In collaboration with patients and their families,⁸ establish goals of care to achieve cure, improve function, slow disease progression, or palliate

2.4. Establish a patient-centred management plan

3. Plan and perform procedures and therapies for the purpose of assessment and/or management

3.1. Determine the most appropriate procedures or therapies

3.2. Obtain and document informed consent, and assent where applicable, explaining the risks and benefits of, alternatives to, and the rationale for a proposed procedure or therapy

3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources

3.4. Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances

3.4.1. Upper gastrointestinal endoscopy and biopsy for screening, surveillance, or diagnosis

3.4.2. Colonoscopy and biopsy for screening, surveillance, or diagnosis

3.4.3. Luminal dilation (*adult stream only*)

⁸ 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.

- 3.4.4. Polypectomy
- 3.4.5. Endoscopic hemostasis
- 3.4.6. Endoscopic foreign body removal
- 3.5. Monitor for, recognize, and manage short- and long-term adverse events of procedures
- 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
- 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

Communicator

Definition:

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

Key and Enabling Competencies: Gastroenterologists 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, including for Indigenous and other systemically marginalized populations
 - 1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety
 - 1.3. Recognize when the values, biases, or perspectives 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
 - 1.4. Respond to a patient's non-verbal behaviours to enhance communication
 - 1.4.1. Apply knowledge of cultural diversity and differences in non-verbal communication
 - 1.5. Manage disagreements and emotionally charged conversations
 - 1.6. Adapt to the unique needs and preferences of each patient and their clinical condition and circumstances

- 1.6.1. Provide inclusive care to persons with diverse gender identities and expressions

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
- 2.2. 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 checking for patient and family understanding
- 3.2. Disclose harmful patient safety incidents to patients and their families accurately and appropriately

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

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. Document procedures and investigations, and provide descriptions and interpretations of relevant findings
 - 5.1.2. Prepare consultation, discharge, progress, or clinic notes that are well organized, document all relevant findings, and provide a plan for ongoing management
- 5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology

- 5.2.1. Demonstrate an understanding of the risks of breaching patient confidentiality as a result of the use of technologies such as telehealth and internet or digital storage and transmission devices
- 5.3. Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding

Collaborator

Definition:

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

Key and Enabling Competencies: Gastroenterologists 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. Demonstrate an understanding of the roles and responsibilities of other professionals in order to work effectively as part of an interprofessional health care team
- 1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions

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

Leader

Definition:

As *Leaders*, Gastroenterologists 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: Gastroenterologists 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 contribute to improving systems of patient care
- 1.2. Contribute to a culture that promotes patient safety
- 1.3. Analyze patient safety incidents to enhance systems of care
- 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
 - 2.1.1. Demonstrate an understanding of and contribute to processes that foster planetary health and stewardship and minimize ecological costs
 - 2.1.2. Demonstrate an understanding of the cost of investigations and interventions to ensure sustainability of the health care system
 - 2.1.3. Demonstrate an understanding of Choosing Wisely Canada⁹ principles in providing rational care by reducing unnecessary investigations, treatments, and procedures
- 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
- 3.2. 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 practices(s) and career
 - 4.2.1. Describe the principles behind the operation of a safe and effective endoscopy unit, including infection prevention and control and sedation

⁹ See choosingwiselycanada.org.

- 4.2.2. Describe the principles behind the operation of a safe and effective medical practice
- 4.3. Implement processes to ensure personal practice improvement
 - 4.3.1. Demonstrate an understanding of the appropriate use of information technology to enhance gastroenterology practice

Health Advocate

Definition:

As *Health Advocates*, Gastroenterologists 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: Gastroenterologists 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 to address determinants of health that affect them and their access to needed health services or resources
 - 1.1.1. Recognize and respond to situations in clinical gastroenterology practice that require involvement of child protection agencies to ensure the best interests of pediatric patients are being upheld (*pediatric stream only*)
- 1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours
- 1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
 - 1.3.1. Demonstrate an understanding of the role of screening tests in reducing morbidity and mortality from gastrointestinal, hepatobiliary, and pancreatic cancers

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. Identify current policies that affect gastrointestinal health, either positively or negatively, including immunization for viral hepatitis, anti-tobacco legislation, alcohol and substance abuse programs, and health care for high-risk populations

- 2.1.2. Apply knowledge of how social and environmental determinants of health¹⁰ affect patients' ability and willingness to access care
- 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. Promote improved access to quality care for Indigenous and other systemically marginalized populations

Scholar

Definition:

As *Scholars*, Gastroenterologists 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: Gastroenterologists 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 curricula on learners
- 2.2. Promote a safe and respectful learning environment, in virtual and in-person settings
- 2.3. Ensure patient safety is maintained when learners are involved
- 2.4. Plan and deliver learning activities in virtual and in-person settings
- 2.5. Provide feedback to enhance learning and performance
- 2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

¹⁰ See the World Health Organization - Pan American Health Organization website at www.paho.org/en/topics/environmental-determinants-health for a definition of the term "environmental determinants of health."

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 or systemically marginalized 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 their families, the findings of relevant research and scholarly inquiry

Professional

Definition:

As *Professionals*, Gastroenterologists 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: Gastroenterologists 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
- 1.4. Recognize and manage conflicts of interest
- 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

2.1.1. Demonstrate fiscal responsibility

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. Exhibit a professional relationship with industry

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, including fatigue risk management

4.1.1. Demonstrate an understanding of occupational risks and their prevention and management, including poor ergonomics, infection, and radiation exposure

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 Gastroenterology by December 31, 2027.

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