Objectives of Training in the Subspecialty of Gastroenterology

2011

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

(Please see also the “Policies and Procedures.”)

DEFINITION

Gastroenterology is the medical subspecialty that deals specifically with the investigation, diagnosis and management of disorders of the digestive system including the pancreas and liver. The subspecialty is further defined by pediatric and adult disciplines based on differences in knowledge and technical skills. There is overlap in some aspects of the two disciplines at the adolescent transition.

GOALS

Upon completion of training, a resident is expected to be a competent subspecialist in Gastroenterology, capable of assuming a consultant’s role in the subspecialty. The resident must acquire a working knowledge of the theoretical basis of the subspecialty, including its foundations in the basic medical sciences and research.

Only candidates certified by the Royal College of Physicians and Surgeons of Canada in Internal Medicine or Pediatrics may be eligible for certification in Gastroenterology.

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

GASTROENTEROLOGY COMPETENCIES

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:
Medical Expert

Definition:

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

1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical care
   1.1. Perform a consultation, 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. Demonstrate effective use of all CanMEDS competencies relevant to Gastroenterology
   1.3. Identify and appropriately respond to relevant ethical issues arising in patient care
   1.4. Demonstrate the ability to prioritize professional duties when faced with multiple patients and problems
   1.5. Demonstrate compassionate and patient-centered care
   1.6. Recognize and respond to the ethical dimensions in medical decision-making
   1.7. Demonstrate medical expertise in situations other than patient care, such as providing expert legal testimony or advising governments, as needed

2. Establish and maintain clinical knowledge, skills and attitudes appropriate to Gastroenterology
   2.1. Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to Gastroenterology, including:
      2.1.1. Anatomy, embryology, physiology and pathology of the digestive system including the pancreas and liver
      2.1.2. Principles of biochemistry, molecular biology and genetics as they apply to the digestive system
      2.1.3. Principles of metabolism, pharmacokinetics, pharmacodynamics and toxicity of drugs commonly used in Gastroenterology
      2.1.4. Principles of endocrinology, intermediary metabolism and nutrition, oncology, microbiology and psychiatry as they apply to the digestive system
      2.1.5. Principles of gastrointestinal surgery including the indications for and the complications of operations on the gastrointestinal tract
      2.1.6. Diseases affecting the digestive system, pancreas and liver including the epidemiology, pathophysiology, methods of diagnosis, management and prognosis of such diseases
2.1.7. Indications, interpretations, limitations, and complications of diagnostic procedures performed on the digestive tract

2.1.8. Hazards of endoscopic procedures for the operator, assistants and patient, and the measures appropriate to minimize such hazards

2.1.9. Principles of fluoroscopy used during endoscopic procedures including the safe use of X-rays for both patient and operator

2.1.10. Advances in the management of gastrointestinal disorders, including organ transplantation, therapeutic endoscopy

2.2. Describe the CanMEDS framework of competencies relevant to Gastroenterology

2.3. Apply lifelong learning skills of the Scholar Role to implement a personal program to keep up-to-date, and enhance areas of professional competence

2.4. Contribute to the enhancement of quality care and patient safety in Gastroenterology, integrating the available best evidence and best practices

3. Perform a complete and appropriate assessment of a patient

3.1. Identify and explore issues to be addressed in a patient encounter effectively, including the patient’s context and preferences

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

3.3. Perform a focused physical examination that is relevant and accurate for the purposes of prevention and health promotion, diagnosis and/or management, with particular emphasis on areas specific to the digestive system and its disorders including nutritional deficiencies

3.4. Select and interpret medically appropriate investigative methods in a resource-effective and ethical manner, including:

3.4.1. Imaging modalities (barium studies, ultrasound, computerized tomography (CT) scan, magnetic resonance imaging (MRI), radioisotope scan, endoscopic retrograde cholangiopancreatography (ERCP), endoscopic ultrasound, capsule endoscopy) for the digestive system, pancreas and liver

3.4.2. Tests commonly employed in gastrointestinal function laboratories including breath tests and motility studies

3.4.3. Tissue biopsies of the gastrointestinal tract and liver

3.4.4. Endoscopic procedures including biopsies of the upper and lower gastrointestinal tract including, but not limited to, colonoscopy, upper endoscopy and sigmoidoscopy

3.4.4.1. Appropriate use and care of equipment used in endoscopic procedures

3.4.5. Appropriate use of clinical data to formulate problems and to correctly develop investigation and management plans to deal with the patient’s problem(s)
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 for gastrointestinal diseases

3.5.1. Demonstrate the ability to recognize, evaluate and manage gastrointestinal emergencies, including, but not limited to:

3.5.1.1. Acute gastrointestinal hemorrhage
3.5.1.2. Acute abdominal pain
3.5.1.3. Fulminant colitis
3.5.1.4. Biliary obstruction, including ascending cholangitis
3.5.1.5. Liver failure
3.5.1.6. Ingested foreign bodies

4. Use preventive and therapeutic interventions effectively

4.1. Implement an effective management plan in collaboration with a patient and their family

4.2. Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to Gastroenterology, including, but not limited to:

4.2.1. Screening colonoscopy
4.2.2. Upper endoscopy for Barrett’s esophagus
4.2.3. Upper endoscopy for portal hypertension
4.2.4. Surveillance for hepatobiliary malignancy

4.3. Ensure appropriate informed consent is obtained for therapies and transfusion of blood products

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 diagnostic procedures relevant to Gastroenterology including:

5.1.1. Upper gastrointestinal (GI) endoscopy and biopsy
5.1.2. Colonoscopy and biopsy
5.1.3. Esophageal manometry
5.1.4. Paracentesis (adult patients only)

5.2. Demonstrate effective, appropriate, and timely performance of therapeutic procedures relevant to Gastroenterology including:

5.2.1. Luminal dilation
5.2.2. Polypectomy
5.2.3. Endoscopic hemostasis  
5.2.4. Foreign body removal  
5.3. Ensure appropriate informed consent is obtained for procedures  
5.4. Document and disseminate information related to procedures performed and their outcomes  
5.5. Ensure adequate follow-up is arranged for procedures performed  

6. Seek appropriate consultation from other health professionals, recognizing the limits of their expertise  
6.1. Demonstrate insight into their own limits 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, Gastroenterologists effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.  

Key and Enabling Competencies: Gastroenterologists are able to...  

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 Gastroenterologists, 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. Communicate effectively in order to obtain a thorough and relevant patient history  
1.6. Be aware of and responsive to nonverbal cues  
1.7. Demonstrate sensitivity to patient concerns when presenting in the presence of a patient and/or family  
1.8. 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

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
   4.2. 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 delivering bad news, and addressing anger, confusion, misunderstanding and language barriers

5. Convey effective oral and written information about a medical encounter
   5.1. Maintain clear, concise, accurate and appropriate records of clinical encounters and plans
   5.2. Demonstrate effective consultation skills in presenting well documented assessments and recommendations in written and/or verbal form including:
       5.2.1. Procedural and specialty test reports
       5.2.2. Responses to requests by other health professionals and third parties
   5.3. Present medical information effectively to the public or media about a medical issue
Collaborator

Definition:

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

Key and Enabling Competencies: Gastroenterologists are able to...

1. Participate effectively and appropriately in an interprofessional health care team
   1.1. Describe the Gastroenterologist’s roles and responsibilities to other professionals
   1.2. Describe the roles and responsibilities of other professionals within the health care team, especially general surgeons, radiologists, pathologists, nurse practitioners, dieticians, social workers and speech language pathologists
   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)
   1.5. 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 interprofessional 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

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, Gastroenterologists 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: Gastroenterologists are able to...

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
       1.1.1. Organize junior trainees to maximize clinical care and educational opportunities
   1.2. Participate in systemic quality process evaluation and improvement, such as patient safety initiatives
       1.2.1. Describe the principles behind the operation of a safe and effective endoscopy unit including infection control and sedation
   1.3. Describe the structure and function of the health care system as it relates to Gastroenterology, 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 including but not limited to endoscopy administration
   4.2. Lead or implement change in health care
   4.3. Plan relevant elements of health care delivery
Health Advocate

Definition:

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

Key and Enabling Competencies: Gastroenterologists are able to...

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
   1.3. Demonstrate an understanding of the role of screening tests in reducing mortality from colorectal cancer and hepatocellular carcinoma

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
      2.2.1. Describe, in broad terms, the key issues currently under debate regarding changes in the Canadian health care system, indicating how these changes might affect societal health outcomes and how Gastroenterologists can advocate to decrease the burden of illness at a community or societal level of conditions or problems relevant to Gastroenterology
      2.2.2. Describe population-based approaches to health care services including screening and immunization programs and their implications for medical practice
   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, and apply this understanding to common problems and conditions in Gastroenterology
   3.2. Identify vulnerable or marginalized populations within those served, including but not limited to candidates for hepatitis B virus (HBV) vaccine, hepatitis C virus (HCV) screening amongst high risk populations and respond appropriately, applying the available knowledge about prevention to "at risk" groups within the practice

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

4.2.1. Identify current policies that affect gastrointestinal health, either positively or negatively including but not limited to immunization for viral hepatitis, anti-tobacco legislation, alcohol and substance abuse programs and health care for high risk populations

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

Key and Enabling Competencies: Gastroenterologists 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
      1.7.1. Demonstrate knowledge of new advances in the management of gastrointestinal disorders including but not limited to organ transplantation, therapeutic endoscopy, endoscopic ultrasound and capsule endoscopy
   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
   2.3.1. Describe and critically appraise recent landmark articles that impact current Gastroenterology practice

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

Professional

Definition:

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

Key and Enabling Competencies: Gastroenterologists 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, disclosure, commitment, compassion, respect and altruism

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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. Recognize the principles and limits of patient confidentiality as defined by professional practice standards and the law
1.6. 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, including physician-industry interaction
   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