

Effective for residents who enter training on or after July 1, 2021.

DEFINITION

Cardiology is the medical subspecialty concerned with the prevention of illness and the diagnosis, management, and rehabilitation of patients with diseases of the cardiovascular¹ system.

CARDIOLOGY PRACTICE

Cardiologists provide care for patients with a range of conditions affecting the cardiovascular system. These include coronary artery disease, valvular heart disease, congenital heart disease, heart failure and cardiomyopathy, hypertension, pulmonary vascular disease, pericardial disease, vascular disease, and arrhythmia.

Cardiologists provide consultation for patients who are critically ill and those with emergent, urgent, and non-urgent cardiovascular presentations. They manage all aspects of care in patients requiring admission to a cardiac intensive care unit. They provide cardiology-focused care for patients requiring hospitalization. In the outpatient setting, they provide diagnosis, treatment, and preventive care. Most patients are referred back to the care of their primary physician, but cardiologists may provide followup, monitoring, and/or chronic disease management for patients with complex cardiovascular disease. Cardiologists may also lead primary and secondary risk factor modification programs and rehabilitation programs for patients with cardiac disease.

Cardiologists perform and interpret cardiac diagnostic and therapeutic procedures. This includes the interpretation of electrocardiograms (ECGs) and Holter monitoring, and the supervision and interpretation of cardiac stress testing. They perform and interpret transthoracic echocardiograms. They obtain, interpret, and apply the results of hemodynamic measurements, including the performance of right heart catheterization. They apply the results of cardiac imaging and diagnostic coronary angiograms to inform management. Cardiologists insert and use temporary wires for cardiac pacing, and interrogate and troubleshoot the functioning of cardiac pacemakers and other implantable cardiac devices.

¹ Throughout this document, the term "cardiovascular" is understood to refer to the cardiovascular system, the peripheral vascular system, the pulmonary circulation, the innervation and/or neurohumoral control and regulation of cardiac function, and hormonal and/or pharmacological influences as these may relate to the cardiovascular system.

Cardiologists consult with other medical specialists, cardiac surgeons, and cardiologists with focused expertise to establish and implement management plans for their patients. The highly specialized care they provide is delivered within an interprofessional team of nurses, diagnostic technicians, and other health care professionals, in consultation with and including patients and their families.²

Cardiologists may engage in broad based practice, particularly in a community based setting, but the evolution of cardiology care has led to increasing specialization within the discipline, with many cardiologists pursuing advanced training and/or focusing their practice in areas such as interventional cardiology, cardiac electrophysiology, echocardiography, heart failure and transplantation, advanced cardiac imaging, and congenital heart disease.

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING

Royal College certification in Internal Medicine.

OR

Eligibility for the Royal College certification examination in Internal Medicine.

OR

Registration in a Royal College-accredited residency program in Internal Medicine (see requirements for these qualifications).

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

ELIGIBILITY REQUIREMENTS FOR CERTIFICATION EXAMINATION³

All candidates must be Royal College certified in Internal Medicine in order to be eligible to write the Royal College certification examination in Adult Cardiology.

² Throughout this document, phrases such as “patients and their families” are intended to include all those who are personally significant to the patient and are concerned with his or her care, including, according to the patient’s circumstances, family members, partners, caregivers, legal guardian, and substitute decision-makers.

³ These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.

CARDIOLOGY COMPETENCIES

Medical Expert

Definition:

As *Medical Experts*, cardiologists 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: Cardiologists 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 Cardiology
- 1.3. Apply knowledge of the clinical and biomedical sciences relevant to Cardiology
 - 1.3.1. Coronary artery disease
 - 1.3.1.1. Normal coronary anatomy
 - 1.3.1.2. Physiology of normal and abnormal coronary blood flow
 - 1.3.1.3. Normal and abnormal endothelial function
 - 1.3.1.4. Pathogenesis of atherosclerosis
 - 1.3.1.5. Risk factors for atherosclerosis, including prevention and management
 - 1.3.1.6. Pathophysiology of acute coronary syndromes
 - 1.3.1.7. Non-atherosclerotic causes of ischemia and infarction
 - 1.3.1.8. Diagnostic techniques, including their sensitivity and specificity
 - 1.3.1.9. Pharmacology⁴ of anti-ischemic, antiplatelet, anticoagulant, thrombolytic, and lipid-lowering agents
 - 1.3.1.10. Principles of revascularization including indications, contraindications, and benefits
 - 1.3.1.11. Sex and gender differences relevant to the presentation, diagnosis, and management of coronary artery disease
 - 1.3.1.12. Ethnic differences relevant to the incidence of coronary artery disease
 - 1.3.2. Valvular heart disease
 - 1.3.2.1. Normal valve structure and function
 - 1.3.2.2. Pathology of valvular disease

⁴ Pharmacology includes mechanisms of action, clinically relevant pharmacokinetics, indications, contraindications, and adverse effects.

- 1.3.2.3. Pathophysiology and hemodynamics of valvular stenosis and regurgitation
- 1.3.2.4. Principles of interventions for valvular disease including indications, medical management, timing, contraindications, benefits, and outcomes
- 1.3.2.5. Types, natural history, and complications of prosthetic valves
- 1.3.3. Congenital heart disease
 - 1.3.3.1. Cardiac embryology
 - 1.3.3.2. Hemodynamics and pathophysiologic effects of intracardiac shunting
 - 1.3.3.3. Congenital lesions in which natural survival to adulthood is likely and their potential complications
 - 1.3.3.4. Congenital lesions in which post-operative survival to adulthood is likely and their potential complications
- 1.3.4. Heart failure and cardiomyopathy
 - 1.3.4.1. Physiology of normal and abnormal ventricular systolic and diastolic function
 - 1.3.4.2. Etiology, prognosis, and natural history
 - 1.3.4.3. Hemodynamic abnormalities in heart failure
 - 1.3.4.4. Neurohormonal abnormalities
 - 1.3.4.5. Ventricular remodeling
 - 1.3.4.6. Pharmacology of medications commonly used in patients with heart failure
 - 1.3.4.7. Principles of non-pharmacologic management options, including resynchronization, surgery, and device implantation
 - 1.3.4.8. Principles of ventricular assist devices
 - 1.3.4.9. Principles of cardiac transplantation
- 1.3.5. Hypertension
 - 1.3.5.1. Definition and diagnosis of hypertension
 - 1.3.5.2. Effect of hypertension on target organs
 - 1.3.5.3. Effect of treatment on complications and mortality
 - 1.3.5.4. Screening, diagnosis, and management of secondary causes of hypertension
 - 1.3.5.5. Pharmacology of antihypertensive agents

- 1.3.6. Pulmonary vascular disease
 - 1.3.6.1. Normal pulmonary vascular physiology
 - 1.3.6.2. Etiology and hemodynamic assessment of pulmonary hypertension
 - 1.3.6.3. Pharmacology of pulmonary vasodilator agents

- 1.3.7. Pericardial disease
 - 1.3.7.1. Normal pericardial anatomy and function
 - 1.3.7.2. Pathology and etiology
 - 1.3.7.3. Effect of pericardial disease on cardiac hemodynamics and function

- 1.3.8. Vascular disease
 - 1.3.8.1. Anatomy and physiology of the arterial system
 - 1.3.8.2. Etiology, risk factors, presentations, cardiac causes, and treatment options of stroke, transient ischemic attack (TIA), and other cerebrovascular disease
 - 1.3.8.3. Pathology and etiology of aortic disease
 - 1.3.8.4. Risk factors, clinical presentations, and treatment options for peripheral vascular disease

- 1.3.9. Acute cardiac care
 - 1.3.9.1. Normal and abnormal systemic and pulmonary blood flow, and hemodynamic pressures and resistances
 - 1.3.9.2. Indications and principles of management for ventilation in patients with primary cardiac disease
 - 1.3.9.3. Pharmacology of inotropic, vasopressor, and vasodilator agents
 - 1.3.9.4. Principles of mechanical circulatory support, including intra-aortic balloon counterpulsation
 - 1.3.9.5. Systemic and non-cardiac complications in the critically ill patient
 - 1.3.9.6. Microbiology, natural history, and treatment of infections of the heart, cardiac vessels, and devices

- 1.3.10. Cardiac electrophysiology
 - 1.3.10.1. Normal cellular electrophysiology
 - 1.3.10.2. Normal sinoatrial (SA) node, atrioventricular (AV) node, and conducting system function
 - 1.3.10.3. Mechanisms of arrhythmogenesis
 - 1.3.10.4. Mechanisms of conduction abnormalities
 - 1.3.10.5. Etiology and pathophysiology of syncope

- 1.3.10.6. Diagnostic strategies for arrhythmias, including indications and techniques for ambulatory monitoring
- 1.3.10.7. Pharmacology of antiarrhythmic agents
- 1.3.10.8. Indications and follow-up for, and techniques for, and complications of implantable cardiac devices
- 1.3.10.9. Indications and techniques for, and complications of invasive electrophysiology studies
- 1.3.10.10. Indications for and complications of invasive ablative techniques

- 1.3.11. Pregnancy in patients with cardiovascular disease
 - 1.3.11.1. Normal cardiovascular physiologic changes in pregnancy and their effect in patients with heart disease
 - 1.3.11.2. Principles of the assessment of cardiac risks of pregnancy
 - 1.3.11.3. Use of cardiovascular drugs in pregnancy and the peripartum period

- 1.3.12. Cardio-oncology
 - 1.3.12.1. Cardiotoxicity of cancer therapies

- 1.3.13. Echocardiography
 - 1.3.13.1. Physical principles and instrumentation of ultrasound including M-Mode, two –dimensional and Doppler
 - 1.3.13.2. Use for diagnostic and therapeutic interventions

- 1.3.14. Principles of radiation safety and protection in the performance of cardiac diagnostic studies and therapeutic interventions, including the safe use for both patient and operator

- 1.3.15. Genetic contribution to the susceptibility for and pathogenesis of cardiovascular disease

- 1.3.16. Principles and practice of cardiovascular disease prevention
 - 1.3.16.1. Primary and secondary risk factor modification programs
 - 1.3.16.2. Effect of exercise on cardiac physiology
 - 1.3.16.3. Cardiac rehabilitation

- 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
 - 1.5.1. Prioritize among patients on the basis of the acuity and severity of clinical presentation

- 1.6. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in Cardiology 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, resuscitate, and stabilize patients sustaining, or at risk of, cardiopulmonary arrest
- 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 relevant to the cardiac presentation
 - 2.2.2. Identify the clinical significance of findings on the cardiovascular physical exam
 - 2.2.3. Assess patients for cardiac manifestations of non-cardiac disease
 - 2.2.4. Perform cardiac assessment of patients undergoing surgery
 - 2.2.5. Administer and interpret cardiovascular risk assessment tools
 - 2.2.6. Select and apply results of the following diagnostic investigations
 - 2.2.6.1. Biochemical studies
 - 2.2.6.2. Genetic testing
 - 2.2.6.3. Chest X-ray
 - 2.2.6.4. Clinical electrophysiology
 - 2.2.6.4.1. Electrocardiography
 - 2.2.6.4.2. Exercise (stress) testing
 - 2.2.6.4.3. Ambulatory monitoring (Holter and loop recorders)
 - 2.2.6.4.4. Interrogation of permanent pacemakers and implanted devices
 - 2.2.6.5. Echocardiography
 - 2.2.6.5.1. Transthoracic
 - 2.2.6.5.2. Transesophageal
 - 2.2.6.5.3. Stress
 - 2.2.6.6. Nuclear cardiology imaging
 - 2.2.6.6.1. Rest and stress perfusion imaging and radionuclide angiography

- 2.2.6.7. Cardiac catheterization
 - 2.2.6.7.1. Right and left heart catheterization and hemodynamic assessment
 - 2.2.6.7.2. Angiography and coronary arteriography
 - 2.2.6.8. Advanced cardiac imaging
 - 2.2.6.8.1. Computed Tomography (CT)
 - 2.2.6.8.2. Magnetic Resonance Imaging (MRI)
 - 2.2.6.8.3. Positron Emission Tomography (PET)
 - 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
 - 2.3.1. Recognize and respond to changes in patient's clinical status that indicate a need to reassess goals of care
 - 2.3.2. Recognize when ongoing resuscitation efforts are no longer effective and should be discontinued
 - 2.4. Establish patient-centred management plans for:
 - 2.4.1. Critically ill patients, including provision of hemodynamic support, mechanical support, non-invasive ventilation, and monitoring
 - 2.4.2. Hospitalized patients with acute illness, or acute exacerbations of chronic illness
 - 2.4.3. Ambulatory patients with acute presentations and/or chronic cardiac conditions
 - 2.4.4. Primary and secondary prevention of cardiovascular disease
 - 2.4.5. Cardiac rehabilitation
 - 2.4.6. Monitoring of the evolution of the cardiac condition
 - 2.4.7. Symptom management
 - 2.4.8. End-of-life care
 - 3. Plan and perform procedures and therapies for the purpose of assessment and/or management**
 - 3.1. Determine the most appropriate procedures or therapies
 - 3.1.1. Pharmacologic management
 - 3.1.2. Hemodynamic support
 - 3.1.3. Mechanical circulatory support, including intra-aortic balloon counterpulsation
 - 3.1.4. Invasive and non-invasive ventilation
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- 3.1.5. Renal replacement therapy
- 3.1.6. Invasive electrophysiology studies and interventions
- 3.1.7. Revascularization procedures
 - 3.1.7.1. Percutaneous coronary intervention (PCI)
 - 3.1.7.2. Coronary artery bypass grafting (CABG)
- 3.1.8. Interventions for valvular heart disease
 - 3.1.8.1. Percutaneous
 - 3.1.8.2. Surgical, including minimally invasive
- 3.1.9. Placement of permanent pacemakers, implanted cardiac devices, cardiac resynchronization devices, and loop recorders
- 3.1.10. Cardiac transplantation and/or ventricular assist device therapy in the treatment of advanced heart failure
- 3.1.11. Supportive and end-of-life care
- 3.2. Obtain and document informed consent, explaining the risks and benefits of, 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 diagnostic and therapeutic procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances
 - 3.4.1. Interpret electrocardiograms
 - 3.4.2. Interpret ambulatory monitors (Holter and loop recorders)
 - 3.4.3. Perform and interpret transthoracic echocardiography (M-mode, 2D, and Doppler)
 - 3.4.4. Supervise and interpret exercise (stress) testing
 - 3.4.5. Supervise and interpret rest and stress perfusion imaging and radionuclide angiography
 - 3.4.6. Perform and interpret right heart catheterization and hemodynamic assessment
 - 3.4.7. Interpret left heart catheterization, hemodynamic assessment, coronary angiography, ventriculography, and aortic angiography
 - 3.4.8. Perform therapeutic procedures
 - 3.4.8.1. Placement of temporary transvenous pacemakers
 - 3.4.8.2. Direct current (DC) cardioversion and defibrillation
 - 3.4.8.3. Pericardiocentesis

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. Coordinate treatment and follow-up across care settings

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

Key and Enabling Competencies: Cardiologists 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
- 1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety
- 1.3. Recognize when the perspectives, values, or biases of patients and 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
- 1.5. Manage disagreements and emotionally charged conversations
- 1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances

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 assessing for patient and family understanding
 - 3.1.1. Convey the results of investigations and risk assessment tools to inform decision making
- 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

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. Provide clear, concise, and timely reports of cardiac diagnostic studies
 - 5.1.2. Communicate critical values or unexpected results in a timely manner
- 5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology
- 5.3. Share information with patients and others in a manner that enhances understanding and that respects patient privacy and confidentiality

Collaborator

Definition:

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

Key and Enabling Competencies: Cardiologists 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. Make effective use of the scope and expertise of other health care professionals
 - 1.2.2. Delegate responsibilities to members of interprofessional health care teams respectfully
- 1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
 - 1.3.1. Contribute expertise to interprofessional heart teams
 - 1.3.2. Consult with other specialists and colleagues with regard to the patient's medical and surgical issues
 - 1.3.3. Consult with other health professionals to address the patient's social and/or rehabilitative concerns

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*, Cardiologists 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: Cardiologists 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
- 1.2. 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. Allocate limited or high cost resources, considering utility, efficacy, and fairness
- 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 practice(s) and career
- 4.3. Implement processes to ensure personal practice improvement

Health Advocate

Definition:

As *Health Advocates*, cardiologists 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: Cardiologists 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. Assess the patient's ability to adhere with a therapeutic program
 - 1.1.2. Facilitate access to appropriate health and social services
- 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. Apply appropriate secondary prevention strategies for cardiac diseases, according to current guidelines
 - 1.3.2. Recommend screening for relatives of patients with identified genetic associations

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 at risk for cardiovascular disease to identify the determinants of health that affect them
 - 2.1.1. Provide primary and secondary prevention strategies for cardiovascular disease
 - 2.1.2. Utilize biologic, psychosocial, environmental, and economic information in a management and prevention plan
- 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

Scholar

Definition:

As *Scholars*, cardiologists 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: Cardiologists 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
 - 4.4.1. Conduct scholarly work
- 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*, cardiologists 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: Cardiologists 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
 - 1.1.1. Maintain professional interpersonal boundaries with patients, colleagues, and learners
 - 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
 - 2.2. Demonstrate a commitment to patient safety and quality improvement

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

- 3.1. Fulfil and adhere to professional and ethical codes, standards of practice, and laws governing practice
- 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
 - 4.1.1. Develop effective strategies to monitor fatigue, burnout, and psychological distress, and mitigate effects on clinical performance
 - 4.1.2. Demonstrate a commitment to safe practices in Cardiology to minimize occupational risk
- 4.2. Manage personal and professional demands for a sustainable practice throughout the cardiologist 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 Cardiology by December 2021.

APPROVED – Specialty Standards Review Committee – April 2019

REVISED CBD LAUNCH DATE – Specialty Committee in Cardiology – May 2020