

Effective for residents who enter training on or after July 1st 2018.

DEFINITION

Surgical Foundations encompasses the core foundational surgical competencies that are required for the following surgical specialties:

- Cardiac Surgery
- General Surgery
- Neurosurgery
- Obstetrics and Gynecology
- Orthopedic Surgery
- Otolaryngology – Head and Neck Surgery
- Plastic Surgery
- Urology
- Vascular Surgery

Surgical Foundations is that initial period of postgraduate training required to acquire the knowledge, skills and attitudes underlying the basics to the practice of surgery in general; and to prepare for further training in a surgical specialty or subspecialty.

ELIGIBILITY REQUIREMENTS

Enrolment in a Royal College accredited residency program in these areas.

GOALS

Upon completion of Surgical Foundations, residents will be competent to provide the assessment and initial management of surgical patients, participate in surgical care, and assume responsibility for post-operative management.

Residents will also be able to provide the initial management of patients with trauma, and initial resuscitation and management of critically ill surgical patients with insight and awareness of the limits of their own expertise.

SURGICAL FOUNDATIONS 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, Surgical Foundations residents 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: Surgical Foundations residents 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
- 1.3. Apply knowledge of the clinical and biomedical sciences relevant to Surgical Foundations:
 - 1.3.1. Anatomy relevant to all basic surgical approaches
 - 1.3.2. Physiology as it relates to risk assessment, post-operative care and the acute care setting
 - 1.3.3. Metabolic responses to surgical stress including catabolic response, need for metabolic support, and endocrine changes
 - 1.3.4. Sepsis and the inflammatory response as it pertains to metabolic and hemodynamic patterns, and their impact on organ systems
 - 1.3.5. Disease states and their impact on the surgical patient including cardiac, pulmonary, renal, endocrine, hepatic, and hematologic systems
 - 1.3.6. Indications for, complications, and benefits of nutritional support, including enteral and parenteral feeding
 - 1.3.7. Risk assessment strategies and scores for the pre and peri-operative patient
 - 1.3.8. Diagnostic modalities including their technology and limitations
 - 1.3.9. Radiation safety principles as they apply to patients and practitioners
 - 1.3.10. Medical treatments and their impact on the surgical management of a patient
 - 1.3.11. Blood products and derivatives, including types, indications, and adverse reactions
 - 1.3.12. Surgical aspects of oncology
 - 1.3.13. Principles of advanced trauma life support (ATLS) or trauma care including initial management

- 1.3.14. Epidemiology, clinical presentation, and management of common infections
 - 1.3.14.1. Community and hospital acquired bacteria, fungi, and viruses
 - 1.3.14.2. Impact of blood borne pathogens, including HIV, Hepatitis B, and Hepatitis C
- 1.3.15. Principles of transplant immunology
- 1.3.16. Principles of the conduct of a surgical procedure
 - 1.3.16.1. Application of the surgical safety checklist
 - 1.3.16.2. Attention to patient safety during the procedure
 - 1.3.16.3. Protection of patient and surgical team from pathogens
 - 1.3.16.4. Principles of wound healing
 - 1.3.16.5. Principles of energy sources, including electrocautery and laser
 - 1.3.16.6. Principles of prophylaxis, including antimicrobial and thromboembolic
 - 1.3.16.7. Principles of anesthesia, analgesia and sedation
- 1.3.17. Principles of routine post-operative patient care
 - 1.3.17.1. Wound care
 - 1.3.17.1.1. Intentionally delayed wound closure
 - 1.3.17.1.2. Negative pressure wound therapy
 - 1.3.17.2. Management of tubes and drains
 - 1.3.17.3. Fluid management
 - 1.3.17.4. Pain management
- 1.3.18. Pathophysiology and complications in the post-operative surgical patient
 - 1.3.18.1. Circulatory shock
 - 1.3.18.2. Multiple organ dysfunction syndrome
 - 1.3.18.3. Cardiac
 - 1.3.18.4. Endocrine
 - 1.3.18.5. Gastrointestinal
 - 1.3.18.6. Genitourinary
 - 1.3.18.7. Hemostasis
 - 1.3.18.8. Neurologic
 - 1.3.18.9. Psychiatric
 - 1.3.18.10. Pulmonary

- 1.3.18.11. Vascular
- 1.3.18.12. Common postsurgical infections
- 1.3.18.13. Pressure sores
- 1.3.18.14. Compartment syndromes: abdominal; extremity

1.3.19. Medical and psychosocial issues at the end of life, and principles of palliative and end-of-life care

- 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 surgical practice

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

- 2.1. Prioritize issues to be addressed in a patient encounter
- 2.2. Elicit a history, perform a physical exam that is relevant, concise and accurate to context; select appropriate investigations; and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
 - 2.2.1. Select appropriate imaging
 - 2.2.2. Demonstrate an approach to the interpretation of common investigational modalities
 - 2.2.2.1. Radiography of the chest and abdomen
 - 2.2.2.2. Common cross-sectional imaging
 - 2.2.2.3. Routine imaging in trauma
 - 2.2.2.4. Ultrasound
 - 2.2.2.5. Electrocardiogram (ECG)
- 2.3. Establish goals of care in collaboration with patients and their families¹, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation
- 2.4. Establish a patient-centred management plan
 - 2.4.1. Pre-operative optimization of the patient with the following conditions:
 - 2.4.1.1. Burns and thermal injuries

¹ Dans ce document, l'expression « famille et proches aidants » inclut toutes les personnes qui ont une importance pour le patient d'un point de vue personnel et qui se préoccupent des soins qui lui sont prodigués, y compris, selon la situation du patient, les membres de sa famille, les partenaires, les aidants naturels, les tuteurs et représentants légaux.

- 2.4.1.2. Cardiac disease
 - 2.4.1.2.1. Arrhythmias
 - 2.4.1.2.2. Heart failure
 - 2.4.1.2.3. Ischemic heart disease
 - 2.4.1.2.4. Valvular heart disease
 - 2.4.1.3. Disorders of hemostasis: congenital and acquired
 - 2.4.1.4. Endocrine disease
 - 2.4.1.4.1. Adrenal
 - 2.4.1.4.2. Diabetes
 - 2.4.1.4.3. Thyroid
 - 2.4.1.5. Immunosuppression
 - 2.4.1.5.1. Chronic disease states
 - 2.4.1.5.2. Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS)
 - 2.4.1.5.3. Secondary to medications
 - 2.4.1.5.3.1. Post-transplant
 - 2.4.1.6. Infections
 - 2.4.1.7. Liver disease
 - 2.4.1.7.1. Cirrhosis and its complications
 - 2.4.1.8. Malnutrition
 - 2.4.1.9. Morbid obesity
 - 2.4.1.10. Pregnancy
 - 2.4.1.11. Pulmonary disease
 - 2.4.1.11.1. Chronic obstructive pulmonary disease (COPD)
 - 2.4.1.11.2. Respiratory failure
 - 2.4.1.11.3. Sleep apnea
 - 2.4.1.12. Renal disease
 - 2.4.1.12.1. Acid-base and electrolyte disorders
 - 2.4.1.12.2. Renal dysfunction
 - 2.4.1.13. Shock of all types
 - 2.4.1.14. Trauma (according to ATLS protocols)
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- 2.4.2. Management of unexpected peri-operative bleeding both surgical and nonsurgical
- 2.4.3. Use of appropriate prophylaxis:
 - 2.4.3.1. Antibiotic
 - 2.4.3.2. Thromboembolic
 - 2.4.3.3. Immunization, including tetanus

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. Inform the patient and family concerning alternatives for operative and non-operative 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 procedures in a timely, skillful, and safe manner, adapting to unanticipated findings or changing clinical circumstances

Pre-procedural skills:

- 3.4.1. Apply aseptic technique for all procedures
- 3.4.2. Gather and manage the availability of appropriate instruments and materials for minor procedures
- 3.4.3. Obtain appropriate assistance
- 3.4.4. Ensure maintenance of sterility
- 3.4.5. Maintain universal precautions
- 3.4.6. Ensure safe handling of sharps
- 3.4.7. Hand-cleanse, gown, and glove
- 3.4.8. Position the patient appropriately
- 3.4.9. Mark appropriate side/site
- 3.4.10. Prepare the operative site
- 3.4.11. Cleanse the operative site
- 3.4.12. Demonstrate appropriate draping of the patient
- 3.4.13. Deliver pre-procedural local anesthesia, if appropriate

Procedural skills:

- 3.4.14. Use common surgical instruments appropriately, including clamps, electrocautery, forceps, needle drivers, retractors, scalpel, and scissors
- 3.4.15. Demonstrate effective operative assistance
 - 3.4.15.1. Demonstrate how to provide operative assistance as necessary for the safe and effective performance of operative procedures
 - 3.4.15.2. Take directives from a lead surgeon
- 3.4.16. Demonstrate appropriate use of operative assistance
 - 3.4.16.1. Recognize when to use operative assistance for the safe and effective performance of operative procedures
 - 3.4.16.2. Demonstrate understanding of personal technical limitations
 - 3.4.16.3. Direct assistants
- 3.4.17. Select and use suture materials appropriately
- 3.4.18. Perform the following surgical skills
 - 3.4.18.1. Incision using sharp and energy-based instruments
 - 3.4.18.2. Blunt and sharp dissection without injury to adjacent structures
 - 3.4.18.3. Tissue handling with attention to the preservation of tissue vitality
 - 3.4.18.4. Vascular control in elective and critical situations
 - 3.4.18.5. Closure of simple wounds
 - 3.4.18.5.1. Suturing and knot tying
 - 3.4.18.6. Selection and application of a wound dressing
 - 3.4.18.7. Selection and placement use of tubes and/or drains
 - 3.4.18.8. Insertion of a urethral catheter
 - 3.4.18.9. Insertion of a nasogastric tube
 - 3.4.18.10. Application of a tourniquet
 - 3.4.18.11. Application of a splint for bony injury or soft tissue injury
 - 3.4.18.12. Drainage of a superficial abscess
 - 3.4.18.13. Biopsy
 - 3.4.18.14. Securing of arterial and venous vascular access in critical and non-critical situations
 - 3.4.18.15. Debridement of pressure sore or foot ulcer

3.4.19. Perform the following procedures in critical situations:

3.4.19.1. Needle thoracostomy

3.4.19.2. Tube thoracostomy

3.4.19.3. Surgical airway

3.4.19.3.1. Needle cricothyroidotomy

3.4.19.3.2. Cricothyroidotomy or tracheostomy

Post-procedural skills:

3.4.20. Prepare and handle specimens for intraoperative consultation with a pathologist

3.4.21. Use appropriate specimen collection techniques, including choosing correct specimen container and fixative/preservative

3.4.22. Perform appropriate wound surveillance and dressing care

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. Implement a post-operative care plan for management of patients with:

4.1.1.1. Uneventful post-operative course

4.1.1.2. Complicated post-operative course:

4.1.1.2.1. Fever

4.1.1.2.2. Cardiac

4.1.1.2.2.1. Arrhythmias

4.1.1.2.2.2. Heart failure

4.1.1.2.2.3. Ischemia

4.1.1.2.3. Gastrointestinal

4.1.1.2.3.1. Anastomotic leak

4.1.1.2.3.2. Bleeding

4.1.1.2.3.3. Bowel obstruction

4.1.1.2.3.4. Bowel perforation

4.1.1.2.3.5. Fistula

4.1.1.2.3.6. Ileus

4.1.1.2.4. Pulmonary

4.1.1.2.4.1. Aspiration pneumonia

- 4.1.1.2.4.2. Hospital-acquired pneumonia
- 4.1.1.2.4.3. Pneumothorax
- 4.1.1.2.4.4. Pulmonary embolus
- 4.1.1.2.4.5. Respiratory failure
- 4.1.1.2.5. Renal
 - 4.1.1.2.5.1. Acid-base and electrolyte disorders
 - 4.1.1.2.5.2. Renal dysfunction
 - 4.1.1.2.5.3. Oliguria; anuria
- 4.1.1.2.6. Thromboembolic
 - 4.1.1.2.6.1. Acute arterial occlusion
 - 4.1.1.2.6.2. Deep venous thrombosis
- 4.1.1.2.7. Sepsis associated with
 - 4.1.1.2.7.1. Catheter
 - 4.1.1.2.7.2. Superficial surgical site infection
 - 4.1.1.2.7.3. Deep surgical site infection
- 4.1.1.2.8. Compartment syndrome
 - 4.1.1.2.8.1. Abdominal
 - 4.1.1.2.8.2. Extremity
- 4.1.1.2.9. Fat embolism
- 4.1.1.2.10. Pressure sores

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
 - 5.1.1. Demonstrate an understanding of the steps to take when there has been a break in universal precautions or a potential contamination
 - 5.1.2. Recognize complications that stem from operative positioning
- 5.2. Adopt strategies that promote patient safety and address human and system factors
 - 5.2.1. Apply an error prevention system in the operating room

Communicator

Definition:

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

Key and Enabling Competencies: Surgical Foundations residents 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, 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. Respect diversity and differences in decision-making, including but not limited to those that arise as an impact of:
 - 1.3.1.1. Age
 - 1.3.1.2. Cultural beliefs
 - 1.3.1.3. Family composition
 - 1.3.1.4. Gender and gender identity
 - 1.3.1.5. Religion
 - 1.3.1.6. Sexual orientation
 - 1.3.1.7. Socioeconomic status
- 1.4. Respond to a patient's non-verbal behaviours to enhance communication
- 1.5. Manage disagreements and emotionally charged conversations, including those that result from:
 - 1.5.1. Addressing anger, confusion, and misunderstanding
 - 1.5.2. Cultural differences
 - 1.5.3. Language barriers
 - 1.5.4. Delivering bad news
 - 1.5.5. Disclosing adverse events
 - 1.5.6. Discussing end-of-life care
 - 1.5.7. Discussing organ donation

- 1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances
 - 1.6.1. Encourage discussion, questions, and interaction in the encounter
- 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. Identify and effectively explore issues to be addressed in a surgical patient encounter, including patient context and preferences
 - 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
 - 3.1.1. Obtain appropriate consent for sharing information
 - 3.1.2. Plan and discuss appropriate post-operative care and issues with patients and families
 - 3.1.3. Discuss immediate and long-term follow-up issues with patients and families, as appropriate
 - 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. Prepare recommendations in written and/or verbal form in response to a request from another health care professional
- 5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology
 - 5.2.1. Demonstrate an understanding of the risk of breaching patient confidentiality as a result of the use of new 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*, Surgical Foundations residents work effectively with other health care professionals to provide safe, high-quality patient-centred care.

Key and Enabling Competencies: Surgical Foundations residents 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
- 1.3. 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 verbal and written communication, during a patient transition to a different healthcare professional, setting, or stage of care
 - 3.2.1. Arrange for the appropriate resources and health care professional assistance be available for the surgical patient

Leader

Definition:

As *Leaders*, Surgical Foundations residents 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: Surgical Foundations residents 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
 - 1.1.1. Describe the use of a pre-operative team checklist and how it improves patient safety
- 1.2. Contribute to a culture that promotes patient safety
 - 1.2.1. Adhere to institutional safety procedures
 - 1.2.2. Report patient safety incidents
- 1.3. Analyze patient safety incidents to enhance systems of care
 - 1.3.1. Participate in continuous quality improvement activities, including but not limited to morbidity and mortality rounds
- 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 professional practice

- 3.1. Demonstrate leadership skills to enhance health care
- 3.2. Facilitate change in health care to enhance services and outcomes
 - 3.2.1. Demonstrate an understanding of the introduction of new technologies and the need for:
 - 3.2.1.1. Health technology assessment
 - 3.2.1.2. Education of self, others and teams
 - 3.2.1.3. Credentialing

4. Manage career planning, finances, and health human resources in a practice

- 4.1. Set priorities and manage time to integrate practice and personal life
- 4.2. Manage a career and a 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 surgical practice, including:
 - 4.3.1.1. Presentation software
 - 4.3.1.2. Personal digital assistants (PDAs), such as smart phones
 - 4.3.1.3. Simulation and other technologies
 - 4.3.1.4. Social media

Health Advocate

Definition:

As *Health Advocates*, Surgical Foundations residents 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: Surgical Foundations residents 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
- 1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours
 - 1.2.1. Encourage patients to wear appropriate safety equipment for work and leisure pursuits

- 1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
 - 1.3.1. Perform screening for
 - 1.3.1.1. Child abuse
 - 1.3.1.2. Elder abuse
 - 1.3.1.3. Intimate partner abuse
 - 1.3.1.4. Domestic violence
 - 1.3.2. Counsel regarding risk factors to health
 - 1.3.2.1. Obesity
 - 1.3.2.2. Smoking
 - 1.3.2.3. Substance use and abuse
 - 1.3.2.4. Other patient behaviours that place them at risk for injury or disease
 - 1.3.3. Counsel regarding opportunities for health and wellness
 - 1.3.4. Identify and advocate for vulnerable populations

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 them
- 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. Demonstrate an appreciation of the importance of organ transplantation and identify potential donors

Scholar

Definition:

As *Scholars*, Surgical Foundations residents demonstrate a lifelong commitment to excellence in practice through continuous learning, and by teaching others, evaluating of evidence, and contributing to scholarship.

Key and Enabling Competencies: Surgical Foundations Residents 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
 - 1.1.1. Recognize the duality of being a learner as well as a practitioner
 - 1.1.2. Utilize learning portfolios, which may incorporate:
 - 1.1.2.1. Surgical logs
 - 1.1.2.2. Encounter cards
 - 1.1.2.3. Personal reflection pieces
- 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-modeling and the impact of the formal, informal, and hidden curriculum on learners
- 2.2. Promote a safe learning environment
- 2.3. Ensure patient safety is maintained when learners are involved
 - 2.3.1. Demonstrate an understanding of the role of appropriate supervision
- 2.4. Plan and deliver a learning activity
- 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 their families, the findings of relevant research and scholarly inquiry

Professional

Definition:

As *Professionals*, Surgical Foundations residents 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: Surgical Foundations residents 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 ethical issues encountered in practice
- 1.4. Recognize and manage conflicts of interest
 - 1.4.1. Demonstrate an awareness of the influence of industry on practice and training
- 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 surgeon-led regulation

- 3.1. Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice
 - 3.1.1. Demonstrate an awareness of
 - 3.1.1.1. The Canada Health Act
 - 3.1.1.2. Pertinent provincial and federal health legislation
 - 3.1.1.2.1. Personal Health Information Protection Act (PHIPA)
 - 3.1.1.3. Provincial regulatory bodies
 - 3.1.1.4. Hospital governance
 - 3.1.1.5. Operating room governance
 - 3.1.1.6. Role of the Coroner's Office/Medical Examiners
 - 3.1.1.7. Public health as it relates to mandatory reporting of disease
 - 3.1.2. Apply knowledge of institutional policies procedures and guidelines for residency code of conduct
 - 3.1.3. Apply the law, as well as local policies and procedures relevant to substitute decision making, goals of care, advanced health care directives, and medical aid in dying (MAID)
- 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. Demonstrate an understanding of techniques for stress reduction
 - 4.1.1.1. Coping mechanisms for loss and adverse outcomes
 - 4.1.2. Demonstrate an understanding of occupational risks and their management
 - 4.1.2.1. Ergonomics
 - 4.1.2.2. Infection
 - 4.1.2.3. Radiation
 - 4.1.2.4. Fire

- 4.1.3. Promote a healthy lifestyle and demonstrate awareness of personal at-risk behaviours
 - 4.1.3.1. Substance abuse
 - 4.1.3.2. Fatigue management
 - 4.1.3.3. Healthy relationships
 - 4.1.3.4. Immunizations
- 4.2. Manage personal and professional demands for a sustainable practice throughout the surgeon 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 Surgical Foundations Advisory Committee by September 2019.

APPROVED – Specialty Standards Review Committee – September 2017