

Effective for residents who enter training on or after July 1st 2020

MEDICAL EXPERT MILESTONES: RESIDENCY

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
1. Practise medicine within their defined scope of practice and expertise				
1.1. Demonstrate a commitment to high-quality care for their patients		Demonstrate compassion for patients	Demonstrate responsibility and accountability for decisions regarding patient care C3a	Demonstrate a commitment to high-quality care of their patients
1.2. Integrate the CanMEDS Intrinsic Roles into their practice of General Surgery	Explain how the Intrinsic Roles need to be integrated into the practice of General Surgery to deliver optimal patient care			Integrate the CanMEDS Intrinsic Roles into their practice of General Surgery
1.3. Apply the competencies of Surgical Foundations		Apply the competencies of Surgical Foundations		
1.4. Apply knowledge of the clinical and biomedical sciences relevant to General Surgery		Apply clinical and biomedical sciences to manage core patient presentations in General Surgery Apply knowledge of anatomy, key landmarks,	Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentations in General Surgery C3a	

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		<p>and the surgical procedure F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p>		
1.5. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner		<p>Perform focused clinical assessments with recommendations that are well-documented</p> <p>Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance F1</p>	<p>Perform a clinical assessment that addresses all relevant issues C1 C4</p>	<p>Perform appropriately-timed clinical assessments addressing the breadth of General Surgery with recommendations that are well-organized and properly documented in written and/or oral form</p>
1.6. Carry out professional duties in the face of multiple, competing demands		<p>On the basis of patient-centered priorities, seek assistance to prioritize multiple competing tasks that need to be addressed</p>	<p>Maintain a duty of care and patient safety while balancing multiple responsibilities</p> <p>Prioritize patients on the basis of clinical presentations</p>	<p>Carry out professional duties in the face of multiple, competing demands</p>
1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in General Surgery practice	<p>Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making</p>	<p>Develop a plan that considers the current complexity, uncertainty, and ambiguity in a clinical situation</p>	<p>Adapt care as the complexity, uncertainty, and ambiguity of the patient's clinical situation evolves</p> <p>Seek assistance when appropriate C1</p>	<p>Recognize and respond to the complexity, uncertainty, and ambiguity inherent in General Surgery practice TP1</p>

MEDICAL EXPERT MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

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

<p>2.1. Prioritize issues to be addressed in a patient encounter</p>		<p>Determine the acuity of the issue and establish priorities for patient care F2</p> <p>Initiate resuscitation F2</p> <p>Iteratively establish priorities, considering the perspective of the patient and family (including values and preferences) as the patient's situation evolves</p>	<p>Prioritize the clinical assessment of a patient with traumatic injury, applying ATLS guidelines C2</p> <p>Consider clinical urgency, feasibility, availability of resources, and comorbidities in determining priorities to be addressed during the current encounter or during future visits or with other health care practitioners</p>	<p>Prioritize which issues need to be addressed during future visits or with other health care practitioners</p>
<p>2.2. Elicit a history, perform a physical exam and select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion</p>		<p>Elicit an accurate, concise, and relevant history F1</p> <p>Perform a physical exam that informs the diagnosis F1</p> <p>Develop a differential diagnosis relevant to the patient's presentation F1 F2</p> <p>Select and/or interpret appropriate investigations, including imaging F1 F2 C2</p> <p>Assess age, co-morbidities, and clinical status to determine peri-procedural risk and</p>	<p>Focus the clinical encounter, performing it in a time-effective manner without excluding key elements in complex patients C1</p> <p>Select and interpret appropriate investigations based on a differential diagnosis C1</p> <p>Synthesize patient information to determine diagnosis</p> <p>Synthesize patient information to assess indications and risk of surgery C1</p>	<p>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</p>

		<p>opportunities for risk mitigation _{F4b}</p> <p>Assess patient suitability to undergo an endoscopic procedure _{F4b}</p>	<p>Interpret the results of investigations performed to monitor the condition and/or treatment _{C4}</p> <p>Synthesize patient information to determine response to treatment, status of the disease, and/or presence of complications _{C4}</p> <p>Integrate the patient's other medical problems, overall functioning, and current health status into the decision regarding plan of care _{C4}</p>	
<p>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</p>		<p>Work with the patient and their family to understand relevant options for care</p> <p>Address with the patient and family their ideas about the nature and cause of the health problem, fears and concerns, and expectations of health care professionals</p>	<p>Recognize and respond to signs that it is time to transition to a palliative care approach _{C4}</p> <p>Address the impact of the medical condition on the patient's ability to pursue life goals and purposes</p> <p>Share concerns about goals of care that are not felt to be achievable with the patient in a constructive and respectful manner _{C4}</p>	<p>Establish goals of care in collaboration with the patient and family, which may include slowing disease progression, achieving cure, improving function, and palliation</p>
<p>2.4. Establish a patient-centred management plan, including non-operative, preoperative,</p>		<p>Develop and implement a plan for initial management _{F1}</p>	<p>Develop a plan for management which may include observation, surgical intervention</p>	<p>Establish patient-centred management plans _{TP1}</p>

*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.

<p>operative, and postoperative care for patients</p>		<p>Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines</p> <p>Order the preparation for the endoscopic procedure to optimize procedural outcomes F4b</p> <p>Discuss with the patient and family the degree of uncertainty inherent in all clinical situations</p>	<p>and/or non-operative intervention C1 C2</p> <p>Develop and implement management plans that consider all of the patient's health problems and context C1</p> <p>Develop and implement a plan, which may include further investigation, surveillance, medical treatment, and/or surgical intervention C4</p> <p>Institute and monitor nutritional support via enteral or parenteral routes C3a</p> <p>Develop and implement plans for ongoing care, discharge, and follow-up C3a</p> <p>Develop, in collaboration with a patient and his or her family, a plan to deal with clinical uncertainty</p>	
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MEDICAL EXPERT MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

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

<p>3.1. Determine the most appropriate procedures or therapies</p>		<p>Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy</p> <p>Describe to patients common procedures or therapies for common conditions in their discipline</p>	<p>Determine if the condition warrants surgical intervention and if the patient is a candidate for interventional procedures ^{C4}</p> <p>Determine the most appropriate procedures or therapies for the purpose of assessment and/or management ^{C3a}</p> <p>Integrate all sources of information to develop a procedural or therapeutic plan that is safe, patient-centred, and considers the risks and benefits of all approaches</p> <p>Integrate planned procedures or therapies into global assessment and management plans</p>	
<p>3.2. Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy</p>		<p>Obtain informed consent for commonly performed procedures and therapies, under supervision</p> <p>Use shared decision-making in the consent process ^{F4a}</p> <p>Explain the risks and</p>	<p>Obtain and document informed consent, explaining the risks and benefits of and the rationale for a proposed procedure or therapy ^{C1 TP1}</p>	<p>Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy</p>

		benefits of, and alternatives for a proposed procedure F4a		
3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources	Recognize and discuss the importance of the triaging and timing of a procedure or therapy	Consider urgency, and potential for deterioration, in advocating for the timely execution of a procedure or therapy	<p>Triage a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources C2</p> <p>Advocate for a patient's procedure or therapy on the basis of urgency and available resources</p>	Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources
3.4. Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances	<p>Demonstrate effective procedure preparation, including the use of a pre-procedure time-out or safety checklist as appropriate</p> <p>Set up and position the patient for a procedure</p>	<p>Perform common diagnostic and surgical procedures in a skilful, fluid, and safe manner with minimal assistance</p> <p>Seek assistance as needed when unanticipated findings or changing clinical circumstances are encountered</p> <p><u>Surgical Procedures:</u></p> <p>Select the appropriate location and sedation for the patient's procedure F4b</p> <p>Set-up, position, and drape the patient for the procedure F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p> <p>Use surgical instruments and equipment correctly and in a fluid manner F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15</p>	<p>Competently perform discipline-specific diagnostic, endoscopic and surgical procedures</p> <p>Document procedures accurately</p> <p>Establish and implement a plan for post-procedure care</p> <p><u>Endoscopy:</u></p> <p>Provide analgesia and sedation to ensure patient safety and comfort C19 C20 TP4</p> <p>Assemble and verify endoscope function C19 C20</p> <p>Intubate the esophagus under direct vision C19</p> <p>Maintain luminal view C19 C20</p>	<p>Perform diagnostic, endoscopic and surgical procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances</p> <p>Anticipate and prepare for technical challenges and/or significant findings TP2 TP3</p> <p>Select appropriate materials and equipment for the procedure TP3</p> <p>Perform surgical procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances TP3</p> <p>Manage unexpected intraoperative findings</p>

		<p>C16 C17 C18</p> <p>Perform safe dissection of relevant structures and tissue layers with gentle tissue handling F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p> <p>Anticipate, recognize, and respond to intraoperative challenges F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p> <p>Demonstrate intraoperative judgement, fluidity of movement, and forward progression F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p> <p>Develop a plan for the appropriate disposition of the patient post procedure, as applicable F4b</p>	<p>Use torque steering appropriately C20</p> <p>Use position change and abdominal pressure to aid luminal views C20</p> <p>Recognize and resolve loop formation C20</p> <p>Identify key anatomic landmarks and clinically relevant findings C19 C20 TP4</p> <p>Achieve clear visualization of the mucosa using a variety of techniques, including air, water and suction C19 C20</p> <p>Perform tissue biopsies in quantity and quality as appropriate to indication C19 C20</p> <p>Use diathermy and other therapeutic techniques appropriately and safely C19 C20 TP4</p> <p>Demonstrate appropriate pace and progress during insertion and withdrawal C19 C20</p> <p>Demonstrate appropriate care of the endoscope C19</p> <p>Identify and respond to immediate complications of the procedure if applicable C19 C20 TP4</p>	<p>and perioperative issues, adjusting the procedure as appropriate TP3</p> <p>Perform endoscopic procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances TP2</p> <p><u>Therapeutic endoscopic procedures</u></p> <p>Select and gather ancillary equipment TP4</p> <p>Manipulate endoscope appropriately, achieving stabilization, orientation and direction TP4</p> <p>Use appropriate strategies for endoscope advancement and mucosal visualization TP4</p> <p>Determine that the procedure is complete, e.g. hemostasis achieved TP4</p> <p>Demonstrate appropriate use and care of endoscopic equipment TP2</p>
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3.5. Provide perioperative care and surgical management in collaboration with a subspecialty surgeon

Provide perioperative care and surgical management in collaboration with a subspecialty surgeon

MEDICAL EXPERT MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

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

<p>4.1. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation</p>		<p>Recognize potential postoperative complications _{F2}</p> <p>Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved</p> <p>Ensure follow-up on results of investigation and response to treatment</p>	<p>Establish plans for ongoing care, taking into consideration the patient's clinical state, circumstances, preferences, and actions, as well as available resources, best practices, and research evidence</p> <p>Determine the frequency and timing of future investigations and visits _{C4}</p> <p>Determine the need and timing of referral to another health care professional _{C3a C4}</p> <p>Ensure patients receive appropriate end of life care _{C3a}</p>	<p>Propose and implement plans for ongoing care, follow-up on investigations, and further treatment or referral _{TP2}</p> <p>Establish plans for post-operative care _{TP3}</p>
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MEDICAL EXPERT MILESTONES: RESIDENCY

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
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	<p>Recognize the occurrence of a patient safety incident</p> <p>Differentiate outcomes of medical conditions and diseases from complications related to the inherent risks of treatments and from patient safety incidents</p>	<p>Prioritize the initial medical response to adverse events to mitigate further injury</p> <p>Incorporate, as appropriate, into a differential diagnoses, harm from health care delivery</p>	<p>Report patient safety incidents to appropriate institutional representatives</p> <p>Recognize near-misses in real time and respond to correct them, preventing them from reaching the patient</p> <p>Identify potential improvement opportunities arising from harmful patient safety incidents and near misses</p> <p>Participate in an analysis of patient safety incidents</p>	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	<p>Describe common types of cognitive and affective bias</p> <p>Describe the principles of situational awareness and their implications for medical practice</p>	<p>Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety</p> <p>Describe strategies to address human and system factors on clinical practice</p> <p>Participate in the surgical safety checklist or equivalent F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p>	Apply the principles of situational awareness to clinical practice	Adopt strategies that promote patient safety and address human and system factors

COMMUNICATOR MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

1. Establish professional therapeutic relationships with patients and their families

<p>1.1. Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion</p>	<p>Communicate using a patient-centred approach that facilitates patient trust and autonomy and is characterized by empathy, respect, and compassion</p>			
<p>1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety</p>	<p>Mitigate physical barriers to communication to optimize patient comfort, dignity, privacy, engagement, and safety</p>	<p>Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety</p>		
<p>1.3. Recognize when the perspectives, values, or biases of patients, patients' families, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly</p>			<p>Recognize when the values, biases, or perspectives 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</p>	

<p>1.4. Respond to a patient's non-verbal behaviours to enhance communication</p>	<p>Identify, verify and validate non-verbal cues on the part of patients and their families</p> <p>Use appropriate non-verbal communication to demonstrate attentiveness, interest, and responsiveness to the patient and family</p>		<p>Respond to patients' non-verbal communication and use appropriate non-verbal behaviours to enhance communication with patients</p>	
<p>1.5. Manage disagreements and emotionally charged conversations</p>		<p>Recognize when personal feelings in an encounter are valuable clues to the patient's emotional state</p> <p>Manage interactions with patients and families when there is discordance regarding decisions to pursue investigations <small>F4a</small></p>	<p>Establish boundaries as needed in emotional situations</p> <p>Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are affecting an interaction and respond appropriately <small>C1</small></p> <p>Manage disagreements and emotionally charged conversations with patients and/or families <small>C3a</small></p>	
<p>1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances</p>		<p>Assess a patient's decision-making capacity</p>	<p>Tailor approaches to decision-making to patient capacity, values, and preferences</p>	<p>Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances</p>

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

<p>2.1. Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information</p>		<p>Conduct a patient-centred interview, gathering all relevant biomedical and psychosocial information for any clinical presentation</p> <p>Integrate and synthesize information about the patient's beliefs, values, preferences, context and expectations with biomedical and psychosocial information</p>	<p>Actively listen and respond to patient cues</p> <p>Integrate, summarize, and present the biopsychosocial information obtained from a patient-centred interview</p>	<p>Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information</p>
<p>2.2. Provide a clear structure for and manage the flow of an entire patient encounter</p>		<p>Conduct a focused and efficient patient interview, managing the flow of the encounter while being attentive to the patient's cues and responses</p>	<p>Manage the flow of challenging patient encounters, including those with angry, distressed, or excessively talkative individuals</p>	<p>Provide a clear structure for and manage the flow of an entire patient encounter</p>
<p>2.3. Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent</p>		<p>Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent</p>		

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

<p>3.1. Share information and explanations that are clear, accurate, and timely while assessing for patient and family understanding</p>	<p>Communicate the diagnosis, prognosis and plan of care in a clear, compassionate, respectful, and accurate manner to the patient and family</p> <p>Recognize when to seek help in providing clear explanations to the patient and family</p>	<p>Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, and management plan</p> <p>Provide information to the patient and/or family clearly and compassionately F1 F4a</p>	<p>Convey information about diagnosis, prognosis and/or current health status clearly and compassionately C1 C2 C4</p> <p>Convey the results of endoscopy and further management plan to the patient/family C19 C20 TP4</p>	<p>Convey information about the procedure, operative findings, and patient status to the family clearly and compassionately TP3</p> <p>Communicate clearly with patients and others in the setting of ethical dilemmas</p>
<p>3.2. Disclose harmful patient safety incidents to patients and their families</p>	<p>Describe the steps in providing disclosure after a patient safety incident</p>		<p>Communicate the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents</p> <p>Apologize appropriately for a harmful patient safety incident</p>	<p>Disclose patient safety incidents to the patient and family accurately and appropriately</p> <p>Plan and document follow-up to harmful patient safety incident</p>

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

<p>4.1. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe</p>	<p>Conduct an interview, demonstrating cultural awareness</p>	<p>Explore the perspectives of the patient and others when developing care plans</p> <p>Communicate with cultural awareness and sensitivity</p>		<p>Facilitate discussions with the patient and family in a way that is respectful, non-judgmental, and culturally safe</p>
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<p>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</p>				<p>Assist the patient and family to identify, access, and make use of information and communication technologies to support care and manage health</p>
<p>4.3. Use communication skills and strategies that help patients and their families make informed decisions regarding their health</p>	<p>Demonstrate steps to obtaining informed consent</p>	<p>Answer questions from the patient and family about next steps</p> <p>Use communication skills and strategies that help the patient make an informed decision <small>F4a</small></p>		

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

<p>5.1. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements</p>	<p>Organize information in appropriate sections within an electronic or written medical record</p> <p>Maintain accurate and up-to-date problem lists and medication lists</p>	<p>Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care</p> <p>Document the consent discussion in an accurate and complete manner F4a</p> <p>Document the clinical encounter to adequately convey clinical reasoning and rationale for decisions and/or recommendations F1 F4b C1 C2</p> <p>Document the surgical procedure in a complete and timely manner F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p>	<p>Adapt record keeping to the specific guidelines of their discipline and the clinical context</p> <p>Identify and correct vague or ambiguous documentation</p> <p>Document findings of an endoscopic procedure in a complete and timely manner C19 C20 TP4</p>	<p>Document clinical encounters in an accurate, complete, and timely manner TP1</p> <p>Document surgical procedures in an accurate complete and timely manner TP3</p>
<p>5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology</p>		<p>Demonstrate reflective listening, open-ended inquiry, empathy, and effective eye contact while using a written or electronic medical record</p>	<p>Adapt use of the health record to the patient's health literacy and the clinical context</p>	<p>Communicate effectively using a written health record, electronic medical record, or other digital technology</p>
<p>5.3. Share information with patients and others in a manner that enhances understanding and respects patient privacy and confidentiality</p>	<p>Assess patients' needs and preferences with respect to methods of information sharing</p>		<p>Adapt written and electronic communication to the specificity of the discipline and to the expectations of patients</p>	<p>Share information with patients and others in a manner that enhances understanding and respects patient privacy and confidentiality</p>

COLLABORATOR MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

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

<p>1.1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care</p>	<p>Compare and contrast enablers of and barriers to collaboration in health care</p>	<p>Respect established rules of their team</p> <p>Receive and appropriately respond to input from other health care professionals F1</p> <p>Differentiate between task and relationship issues among health care professionals</p>	<p>Anticipate, identify, and respond to patient safety issues related to the function of a team</p>	<p>Establish and maintain healthy relationships with physicians and other colleagues in the health care professions to support relationship-centered collaborative care</p>
<p>1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care</p>	<p>Discuss the role and responsibilities of a specialist in General Surgery</p>	<p>Describe the roles and scopes of practice of other health care providers related to General Surgery</p> <p>Consult as needed with other physicians F2</p> <p>Make effective use of operative assistants F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p> <p>Work effectively with the OR team F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18</p>	<p>Consult as needed with other health care professionals, including other physicians</p> <p>Make effective use of the scope and expertise of other health care professionals C3b</p> <p>Communicate effectively with nurses and/or assistants C19 C20 TP4</p>	<p>Negotiate overlapping and shared care responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care TP1</p>
<p>1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions</p>	<p>Discuss with the patient and family any plan for involving other health care professionals, including other</p>	<p>Integrate the patient's perspective and context into the collaborative care plan</p>	<p>Communicate effectively with other physicians and health care professionals C1 C2 C3b</p>	<p>Engage in respectful shared decision-making with physician and other colleagues in the health care</p>

	physicians, in the patient's care		Provide timely and necessary written information to colleagues to enable effective relationship-centered care	professions Use referral and consultation as opportunities to improve quality of care and patient safety by sharing expertise
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2. Work with physicians other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts

2.1. Show respect toward collaborators	Convey information thoughtfully Respond to requests and feedback in a respectful and timely manner	Actively listen to and engage in interactions with collaborators	Delegate tasks and responsibilities in an appropriate and respectful manner <small>c3b</small>	Show respect toward collaborators
2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture		Identify communication barriers between health care professionals Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts Listen to understand and find common ground with collaborators	Gather the information and resources needed to manage differences and resolve conflicts among collaborators Analyze team dynamics Gain consensus among colleagues in resolving conflicts	Implement strategies to promote understanding, manage differences, and resolve conflicts 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		Identify patients requiring handover to other physicians or health care professionals		Determine when care should be transferred to another physician or health care professional
3.2. Demonstrate safe handover of care, using	Describe specific information required for safe and	Communicate with the receiving physicians or health	Organize the handover of care to the most appropriate	

<p>both oral and written communication, during a patient transition to a different health care professional, setting, or stage of care</p>	<p>effective handover during transitions in care</p>	<p>care professionals during transitions in care, clarifying issues after transfer as needed</p> <p>Communicate with the patient's primary health care professional about the patient's care</p> <p>Summarize the patient's issues in the transfer summary, including plans to deal with the ongoing issues</p>	<p>physician or health care professional</p> <p>Analyze gaps in communication between health care professionals during transitions in care</p> <p>Recognize and act on patient safety issues in the transfer of care</p> <p>Provide safe transfer of care, both verbal and written, during patient transitions to a different health care professional, setting, or stage of care c2</p>	
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LEADER MILESTONES: RESIDENCY

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
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	Describe quality improvement methodologies	<p>Compare and contrast the traditional methods of research design with those of improvement science</p> <p>Compare and contrast systems of theory with traditional approaches to quality improvement</p> <p>Seek data to inform practice and engage in an iterative process of improvement</p>	<p>Analyze and provide feedback on processes seen in one's own practice, team, organization, or system</p> <p>Participate in a patient safety and/or quality improvement initiative</p>	Apply the science of quality improvement to contribute to improving systems of patient care
1.2. Contribute to a culture that promotes patient safety			<p>Actively encourage all involved in health care, regardless of their role, to report and respond to unsafe situations</p> <p>Engage patients and their families in the continuous improvement of patient safety</p> <p>Model a just culture to promote openness and increased reporting</p>	<p>Contribute to a culture that promotes patient safety</p> <p>Adhere to occupational safety procedures to ensure patient, personal and team safety ^{TP2}</p>
1.3. Analyze patient safety incidents to enhance systems of care	Describe the available supports for patients and health care professionals when patient safety incidents			Analyze harmful patient safety incidents and near misses to enhance systems of care

	occur			
1.4. Use health informatics to improve the quality of patient care and optimize patient safety	Describe the data available from health information systems in their discipline to optimize patient care		Map the flow of information in the care of their patients and suggest changes for quality improvement and patient safety Use data on measures of clinical performance during team discussions and to support team decision-making	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	Describe the costs of common diagnostic and therapeutic interventions relevant to their discipline	Describe models for resource stewardship in health care used at the institutional level Consider costs when choosing care options Utilize resources appropriately <small>F2</small>	Use clinical judgment to minimize wasteful practices Develop practice-based and system-based rules for resource allocation Allocate health care resources for optimal patient care <small>C3a TP1</small>	
2.2. Apply evidence and management processes to achieve cost-appropriate care		Apply evidence and guidelines with respect to resource utilization in common clinical scenarios	Determine cost discrepancies between best practice and their current practice Optimize practice patterns for cost-effectiveness and cost control	Apply evidence and management processes to achieve cost-appropriate care

3. Demonstrate leadership in professional practice

3.1. Demonstrate leadership	Analyze their own leadership		Contribute to a health care	Demonstrate leadership
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skills to enhance healthcare	styles, including strengths, weaknesses, and biases		change initiative Plan work schedules for the service team C3a	skills to enhance health care
3.2. Facilitate change in health care to enhance services and outcomes		Analyze patient feedback to help improve patient experiences and clinical outcomes Describe key health policy and organizational issues in their discipline	Develop a strategy for implementing change in health care with patients, physicians, and other health care professionals Analyze ongoing changes occurring in health care delivery	Facilitate change in health care to enhance services and outcomes

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

4.1. Set priorities and manage time to integrate practices	Align priorities with expectations for professional practice	Build relationships with mentors Organize work using strategies that address strengths and identify areas to improve in personal effectiveness	Manage time and prioritize tasks C3a Organize work to manage clinical, scholarly, and other responsibilities CSA1	Set priorities and manage time to integrate practice and personal life Manage time effectively in the ambulatory clinic TP1 Manage time effectively to maintain patient and endoscopy flow TP2 Review and act on test results in a timely manner TP1 Integrate supervisory and teaching responsibilities into the overall management of the clinic TP1
4.2. Manage a personal professional practice and career	Review opportunities for practice preparation, including choices available for further training	Examine personal interests and seek career mentorship and counselling	Reconcile expectations for practice with job opportunities and workforce needs	Manage a career and a practice Book operative cases

	<p>Maintain a portfolio and reflect professional development</p>		<p>Adjust educational experiences to gain competencies necessary for future independent practice</p> <p>Describe remuneration models as they pertain to their discipline</p> <p>Plan practice finances, considering short- and long-term goals</p> <p>Apply leadership skills and situational awareness in trauma resuscitation <small>c2</small></p> <p>Run the service efficiently, safely and effectively <small>c3a</small></p>	<p>with appropriate urgency, duration, and equipment and patient preparation <small>TP1</small></p>
<p>4.3. Implement processes to ensure personal practice improvement</p>	<p>Describe how practice standardization can improve quality of health care</p>		<p>Improve personal practice by evaluating a problem, setting priorities, executing a plan, and analyzing the results</p>	<p>Implement processes to ensure personal practice improvement</p>

HEALTH ADVOCATE MILESTONES: RESIDENCY

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
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 and resources	Analyze a given patient’s needs for health services or resources related to the scope of General Surgery	Demonstrate an approach to working with patients to advocate for health services or resources	Facilitate timely patient access to services and resources C3a C4	Work with patients to address the determinants of health that affect them and their access to needed health services or resources TP1
1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours	Identify resources or agencies that address the health needs of patients	Select patient education resources related to General Surgery Educate the patient and family about information and communication technologies to improve health	Apply the principles of behaviour change during conversations with patients about adopting healthy behaviours C1	Work with the patient and family to increase opportunities to adopt healthy behaviours
1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients		Work with the patient and family to identify opportunities for disease prevention, health promotion, and health protection	Evaluate with the patient the potential benefits and harms of health screening Incorporate prevention, health promotion, and health surveillance activities into interactions with individual patients C4	

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

<p>2.1. Work with a community or population to identify the determinants of health that affect them</p>		<p>Identify communities or populations they serve who are experiencing health inequities</p>	<p>Analyze current policy or policy developments that affect the communities or populations they serve</p>	<p>Work with a community or population to identify the determinants of health that affect them</p>
<p>2.2. Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities</p>	<p>Participate in health promotion and disease prevention programs relevant to their practice</p>	<p>Identify patients or populations that are not being served optimally in their clinical practice</p>	<p>Report epidemics or clusters of unusual cases seen in practice, balancing patient confidentiality with the duty to protect the public's health</p>	<p>Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities</p>
<p>2.3. Contribute to a process to improve health in the community or population they serve</p>		<p>Partner with others to identify the health needs of a community or population they serve</p>	<p>Appraise available resources to support the health needs of communities or populations they serve</p> <p>Distinguish between potentially competing health interests of the individuals, communities, and populations they serve</p>	<p>Contribute to a process to improve health in the communities or populations they serve</p>

SCHOLAR MILESTONES: RESIDENCY

Transition to discipline

Foundations of discipline

Core of discipline

Transition to practice

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

<p>1.1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice</p>	<p>Describe physicians' obligations for lifelong learning and ongoing enhancement of competence</p>	<p>Create a learning plan in collaboration with a designated supervisor identifying learning needs related to General Surgery and career goals</p> <p>Use technology to develop, record, monitor, revise, and report on learning in medicine</p> <p>Demonstrate a structured approach to monitoring progress of learning in the clinical setting</p>	<p>Review and update earlier learning plan(s) with input from others, identifying learning needs related to all CanMEDS Roles to generate immediate and longer-term career goals</p>	<p>Develop, implement, monitor, and revise a personal learning plan to enhance professional practice</p>
<p>1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources</p>		<p>Identify, record, prioritize and answer learning needs that arise in daily work, scanning the literature or attending formal or informal education sessions</p>	<p>Seek and interpret multiple sources of performance data and feedback, with guidance, to continually improve performance</p>	<p>Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources</p>
<p>1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice</p>		<p>Identify the learning needs of a health care team</p>		<p>Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice</p>

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

<p>2.1. Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners</p>		<p>Identify behaviours associated with positive and negative role-modelling</p>	<p>Use strategies for deliberate, positive role-modelling</p>	<p>Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners</p>
<p>2.2. Promote a safe learning environment</p>		<p>Explain how power differentials between learners and teachers can affect the learning environment</p>		<p>Ensure a safe learning environment for all members of the team</p>
<p>2.3. Ensure patient safety is maintained when learners are involved</p>		<p>Identify unsafe clinical situations involving learners and manage them appropriately</p>	<p>Supervise junior learners to ensure they work within their limits <small>C3a</small></p> <p>Balance clinical supervision and graduated responsibility, ensuring the safety of patients and learners</p>	<p>Ensure patient safety is maintained when learners are involved</p> <p>Allocate appropriate time for junior learners' educational activities while ensuring patient care, efficiency, resources, and safety are maintained <small>TP3</small></p>
<p>2.4. Plan and deliver learning activities</p>		<p>Demonstrate basic skills in teaching others, including peers</p>	<p>Describe how to formally plan a medical education session</p> <p>Describe sources of information used to assess learning needs</p> <p>Describe clinical teaching strategies relevant to their discipline</p> <p>Identify the learning needs and desired learning outcomes of others <small>CSA2</small></p>	<p>Plan and deliver a learning activity</p>

			<p>Develop learning objectives for a teaching activity <small>CSA2</small></p> <p>Provide formal and informal teaching for junior learners <small>C3b</small></p> <p>Present the information in an organized manner to facilitate understanding <small>CSA2</small></p> <p>Use audiovisual aids effectively <small>CSA2</small></p> <p>Provide adequate time for questions and discussion <small>CSA2</small></p>	
2.5. Provide feedback to enhance learning performance		Provide written or verbal feedback to other learners, faculty and other members of the team	Provide junior learners with useful timely feedback <small>C3b</small>	<p>Provide feedback to enhance learning and performance</p> <p>Role-model regular self-assessment and feedback-seeking behaviour</p>
2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner			Appropriately assess junior learners	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		Recognize uncertainty and knowledge gaps in clinical and other professional encounters relevant to General Surgery	Generate focused questions that address practice uncertainty and knowledge gaps	
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address them				
3.2. Identify, select, and navigate pre-appraised resources		Contrast the various study designs used in medicine and the quality of various pre-appraised resources		Identify, select, and navigate pre-appraised resources
3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature		Interpret study findings, including a critique of their relevance to their practice Determine the validity and risk of bias in a source of evidence	Evaluate the applicability (external validity or generalizability) of evidence from a resource Describe study results in both quantitative and qualitative terms Critically evaluate the integrity, reliability, and applicability of health-related research and literature ^{FSA1} CSA1	
3.4. Integrate evidence into decision-making in their practice		Discuss the barriers to and facilitators of applying evidence into practice Describe how various sources of information, including studies, expert opinion, and practice audits, contribute to the evidence base of medical practice	Identify new evidence appropriate to their scope of professional practice through quality-appraised evidence-alerting services Integrate best evidence and clinical expertise ^{CSA2} Integrate best evidence and clinical expertise into decision-making ^{C3a C4 TP1}	Integrate best evidence and clinical expertise 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			Contribute to a scholarly investigation or the	Demonstrate an understanding of the
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scientific principles of research and scholarly inquiry and the role of research evidence in healthcare			dissemination of research findings in their discipline	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		<p>Discuss and provide examples of the ethical principles applicable to research and scholarly inquiry relevant to General Surgery</p> <p>Identify ethical principles in research <small>FSA1</small></p>		Identify ethical principles for research and incorporate them into obtaining informed consent, considering harm and benefits, and considering vulnerable populations
4.3. Contribute to the work of a research program		<p>Compare and contrast the roles and responsibilities of members of a research team and describe how they differ from clinical and other practice roles and responsibilities</p> <p>Secure a supervisor's commitment for a scholarly project <small>FSA1</small></p>	Actively participate as a research team member, balancing the roles and responsibilities of a researcher with the clinical roles and responsibilities of a physician	Contribute to the work of a research program
4.4. Pose questions amenable to scholarly investigation and select appropriate methods to address them		<p>Describe and compare the common methodologies used for scholarly inquiry in General Surgery</p> <p>Generate focused questions for scholarly investigation <small>FSA1</small></p> <p>Select appropriate methods of addressing a given scholarly question <small>FSA1</small></p>	<p>Select appropriate methods of addressing a given scholarly question</p> <p>Identify, consult, and collaborate with content experts and others in the conduct of scholarly work <small>CSA1</small></p> <p>Collect data for a scholarly project <small>CSA1</small></p> <p>Perform data analysis <small>CSA1</small></p> <p>Integrate existing literature</p>	Pose medically and scientifically relevant and appropriately constructed questions amenable to scholarly investigation

			and findings of data collection <small>CSA1</small> Identify areas for further investigation <small>CSA1</small>	
4.5. Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry		Summarize and communicate to peers the findings of applicable research and scholarship Summarize the findings of a literature review <small>FSA1</small>	Summarize and communicate the findings of research and scholarly inquiry <small>CSA1</small>	Summarize and communicate to professional and lay audiences, including patients and their families, the findings of applicable research and scholarly inquiry Prepare a manuscript suitable for publication in a peer-reviewed journal

PROFESSIONAL MILESTONES: RESIDENCY

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
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	<p>Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met</p> <p>Demonstrate punctuality</p> <p>Complete assigned responsibilities</p>	<p>Independently manage specialty-specific issues surrounding confidentiality, intervening when confidentiality is breached</p> <p>Maintain patient confidentiality_{F1 C1}</p> <p>Work within personal limits, asking for help as needed _{F2 F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18 C19 C20 TP4}</p>	<p>Manage complex issues while preserving confidentiality</p> <p>Intervene when behaviours toward colleagues and learners undermine a respectful environment</p> <p>Exhibit appropriate professional behaviors _{C3b}</p> <p>Respond punctually to requests from patients or other health care professionals _{C3b}</p>	<p>Exhibit appropriate professional behaviours and relationships in all aspects of practice, reflecting honesty, integrity, humility, dedication, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality</p>
1.2. Demonstrate a commitment to excellence in all aspects of practice and to active participation in collaborative care		<p>Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults _{F3 C5 C6 C7 C8 C9 C10 C11 C12 C13 C14 C15 C16 C17 C18}</p>	<p>Analyze how the system of care supports or jeopardizes excellence</p>	<p>Demonstrate a commitment to excellence in all aspects of practice</p> <p>Prepare for the day, reviewing the list of planned procedures _{TP2 TP3}</p> <p>Maintain a log of procedures and their outcomes, as a source of information regarding personal performance _{TP2}</p>
1.3. Recognize and respond to ethical issues encountered in practice			<p>Manage ethical issues encountered in the clinical and academic setting</p>	<p>Recognize and respond to ethical issues encountered in independent practice</p>

1.4. Recognize and manage conflicts of interest			Proactively resolve real, potential, or perceived conflicts of interest transparently and in accordance with ethical, legal, and moral obligations	Recognize and manage conflicts of interest in independent practice
1.5. Exhibit professional behaviours in the use of technology-enabled communication			Intervene when aware of breaches of professionalism involving technology-enabled communication	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		<p>Manage tensions between societal and physician's expectations</p> <p>Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources</p>	<p>Demonstrate a commitment to the promotion of the public good in health care, including stewardship of resources</p> <p>Demonstrate a commitment to maintaining and enhancing competence</p>	Demonstrate accountability to patients, society, and the profession by recognizing and responding to societal expectations of the profession
2.2. Demonstrate a commitment to patient safety and quality improvement		<p>Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures</p> <p>Monitor institutional and clinical environments and respond to issues that can harm patients or the delivery of health care</p>		Demonstrate a commitment to patient safety and quality improvement initiatives within their own practice environment

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

<p>3.1. Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p>			<p>Describe how to respond to, cope with, and constructively learn from a complaint or legal action</p> <p>Demonstrate accountability to the profession and society with regard to the impact of decisions that are made</p> <p>Describe the relevant codes, policies, standards, and laws governing physicians and the profession including standard-setting and disciplinary and credentialing procedures</p>	<p>Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p>
<p>3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and other health care professionals</p>	<p>Respond to peer-group lapses in professional conduct</p>		<p>Describe and identify regulatory codes and procedures relevant to involving a regulatory body in a case of serious unprofessional behaviour or practice</p>	<p>Recognize and respond to unprofessional and unethical behaviours in physicians and other health care professionals</p>
<p>3.3. Participate in peer assessment and standard-setting</p>			<p>Participate in the review of practice, standard setting and quality improvement activities</p> <p>Participate in the assessment of junior learners</p> <p>Prepare a morbidity and mortality report or chart review</p>	<p>Participate in peer assessment and standard-setting</p>

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

<p>4.1. Exhibit self-awareness and effectively manage influences on personal wellbeing and professional performance</p>		<p>Manage the impact of physical and environmental factors on performance</p> <p>Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks</p>	<p>Integrate skills that support adaption and recovery in challenging situations</p>	<p>Exhibit self-awareness and effectively manage influences on personal well-being and professional performance</p> <p>Maintain professional clinical performance in demanding or stressful clinical settings TP3</p>
<p>4.2. Manage personal and professional demands for a sustainable practice throughout the physician life cycle</p>	<p>Recognize evolving professional identity transitions and manage inherent stresses</p>	<p>Describe the influence of personal and environmental factors on the development of a career plan</p>	<p>Manage competing personal and professional priorities</p>	<p>Manage personal and professional demands for a sustainable practice throughout the physician life cycle</p>
<p>4.3. Promote a culture that recognizes, supports, and responds effectively to colleagues in need</p>		<p>Use strategies to mitigate the impact of patient safety incidents</p>	<p>Support others in their professional transitions</p>	<p>Promote a culture that recognizes, supports, and responds effectively to colleagues in need</p> <p>Provide mentorship to colleagues</p>