2022

VERSION 2.0

This document is to be used in conjunction with the *Pathway to Competence User Guide*, which is available on the Royal College's website.

This document is effective July 1, 2022, for current residents who have not yet entered the stage(s) containing revised EPAs and for new residents who begin training on or after that date.

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 of their patients	Demonstrate compassion for their patients		Demonstrate a commitment to high-quality care		
1.2 Integrate the CanMEDS Intrinsic Roles into their practice of Medical Oncology			Integrate the CanMEDS Intrinsic Roles into their practice of Medical Oncology		
1.3 Apply knowledge of the clinical and biomedical sciences relevant to the practice of Medical Oncology		Demonstrate knowledge of the clinical and biomedical sciences relevant to Medical Oncology  • basic sciences as they relate to the development, diagnosis, and management of cancer	Apply knowledge of the clinical and biomedical sciences relevant to Medical Oncology c2  • mechanism of action, indications, principles of administration, complications, and expected outcomes of established and emerging systemic therapeutic modalities,	sciences that are relevant to caring for patients with complex presentations of cancer	

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- screening and preventive methods for different cancers
- diagnostic tools to establish diagnosis and evaluate patients with cancer
- medical emergencies arising from cancer or systemic therapies
- diagnosis and management of paraneoplastic syndromes

Apply a broad base and depth of knowledge of the clinical and biomedical sciences as they apply to the development, diagnosis, and management of common cancers F1

- staging and risk stratification of cancers using the tumour-nodemetastasis (TNM) staging system, other relevant classification systems, and applicable predictive and prognostic indices
- indications, complications, and expected outcomes of surgery, radiation therapy, radiopharmaceuticals, and multimodality therapy for patients with cancer

including cytotoxic therapy, hormonal therapy, molecular targeted therapy, immunotherapy, stem cell transplantation relevant to cancer, and supportive care for prevention and treatment of complications of systemic therapy

Apply a broad base and depth of knowledge of the clinical and biomedical sciences as they apply to the development, diagnosis, and management of all cancers

- staging and risk stratification of cancers using the tumournode-metastasis (TNM) staging system, other relevant classification systems, and applicable predictive and prognostic indices
- indications, complications, and expected outcomes of surgery, radiation therapy, radiopharmaceuticals, and multimodality therapy for patients with cancer
- toxicities and adverse outcomes of multimodality therapeutic interventions as they relate to systemic therapies
- supportive and palliative care of patients with cancer
- principles of medical assistance in dying (MAID)

Describe the natural history of common cancers, incorporating stage, prognostic, and predictive factors

Apply knowledge of conventional systemic therapy, including pharmacology, expected adverse events and their prevention/management F3

- resources for the caregivers and family of the patient with cancer
- issues related to cancer survivorship, including physical, psychological, emotional, vocational, sexual, financial, lifestyle, and fertility effects

Apply knowledge of the natural history of cancers, including risk factors, incidence and prevalence, genetic predisposition, growth and dissemination patterns, and prognostic variables across the full range of cancer presentations c1

Apply knowledge of the clinical and biomedical sciences to the diagnosis and management of the clinical problem c1

Apply knowledge of systemic therapy, including pharmacology, expected adverse events and their prevention/management c3

Apply knowledge of clinical and biomedical sciences as they relate to the management of cancers that arise in special populations, including immunesuppressed, pregnant, and geriatric populations c1

1.4 Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner	Demonstrate the ability to perform a clinical assessment and physical examination of a patient with cancer at the level of an internist  Perform a clinical assessment, including relevant psychosocial factors TTD1	Perform focused clinical assessments of patients presenting with the common presentations in Medical Oncology and make recommendations that are organized and well-documented	Perform a comprehensive clinical assessment c1  Make recommendations that are evidence-based, organized, and aligned with existing or revised goals of care c2	Respond to and address time sensitive clinical questions πρ1
1.5 Carry out professional duties in the face of multiple competing demands	Recognize when multiple competing patient demands may impact the ability to provide patient-centred care	Prioritize multiple competing tasks F5	Maintain duty of care and safe management of patients in the face of multiple competing demands  Prioritize patients on the basis of clinical presentations	Carry out professional duties in the face of multiple competing demands  Triage patients referred to Medical Oncology πρ1  Prioritize activities in the face of competing demands πρ1
1.6 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in clinical practice	Recognize that there is a degree of uncertainty in clinical situations  Identify and seek assistance in situations that are complex, uncertain, ambiguous, or new TTD1	Identify clinical situations in which complexity, uncertainty, and ambiguity inherent in the practice of Medical Oncology exist, including conveying information related to prognosis, and therapeutic decisions in the absence of Level I evidence	Develop a plan that considers the complexity, uncertainty, and ambiguity inherent in the practice of Medical Oncology C1	Recognize, respond to, and adapt care to the complexity, uncertainty, and ambiguity inherent in the practice of Medical Oncology  Recognize the limitations of knowledge with regards to the understanding and management of patients with the full breadth of cancers, take steps to rectify these limitations, and make decisions within the confines of these

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

2.1 Prioritize issues to be addressed in a patient encounter based on level of urgency of the situation, the reason for the consultation or visit, the patient's and family's understanding of the reason for referral, and their goals for the visit

Ascertain the referring physician's reason for consultation

Recognize when an outpatient needs more urgent care TTD1

Ascertain the patient's understanding of the reason for the consultation F1

Ascertain the patient's and/or the family's understanding of the medical situation and reason for the encounter F2 F4

Recognize an urgent or emergent oncology situation and respond in a timely manner F5

Prioritize which issues to address at current encounter, future visits, or with other health care practitioners based on clinical urgency, feasibility, and availability of resources

Prioritize issues to be addressed in a patient encounter, including the patient's context and preferences c2

Reassess the patient's priorities, information preferences, and goals of care as the clinical situation evolves c4

Manage situations where patient and physician priorities may differ

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

Perform a history and physical for a patient with cancer

Assemble data pertinent to the patient's visit, including available laboratory, pathology, and medical imaging reports TTD1 Elicit a history from the patient, appropriate to the context of the encounter (which may include initial consultation, active treatment, follow-up of treatment, recurrence, progression, or survivorship), and informed by the patient's symptoms, diagnosis, prognosis, and anticipated toxicities of treatment for common cancer presentations

Elicit a history from the patient, appropriate to the context of the encounter (which may include initial consultation, active treatment, follow-up of treatment, recurrence, progression, or survivorship), and informed by the patient's symptoms, diagnosis, prognosis, and anticipated toxicities of treatment for the breadth of cancer presentations

Conduct a clinical assessment in challenging or unusual situations

Identify limitations of standard diagnostic tests and explore and order other modalities if required Perform a physical examination that is appropriate to the context of the encounter (which may include initial consultation, active treatment, follow-up of treatment, or survivorship), and informed by the patient's symptoms, diagnosis, prognosis, and anticipated toxicities of treatment for common cancer presentations

Elicit a history from the patient and perform a physical examination that is appropriate to the context of the oncology patient seen in the emergency department or on the inpatient service

Perform a comprehensive clinical assessment, including performance status, psychosocial issues, and goals of care F1

Perform a focused, context-specific clinical assessment, including reassessing the patient's performance status F2

Assess/reassess the patient's performance status and functional status and assign an Eastern Cooperative Oncology Group (ECOG) or Karnofsky Performance Status (PS) to patients

Perform a physical examination that is appropriate to the context of the encounter (which may include initial consultation, active treatment, follow-up of treatment, or survivorship), and informed by the patient's symptoms, diagnosis, prognosis, and anticipated toxicities of treatment for the breadth cancer presentations

Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management of disease, prevention, and health promotion for patients with cancer that is suspected, diagnosed, under observation or treatment, or cured

Determine a patient's functional status (including performance status and independence with activities of daily living) to allow goals of care and patient-centred management plans to be established

Stage a wide range of cancers using the tumour, node, metastasis (TNM) system or other relevant classification system

Select and interpret appropriate diagnostic tests (such as laboratory, molecular and standard pathology, diagnostic and functional imaging, and endoscopy) appropriate to the context of the encounter (which may include initial consultation, active treatment, follow-up of treatment, recurrence, progression, or survivorship), and informed by the patient's symptoms, diagnosis, prognosis, and anticipated toxicities of treatment

Interpret available investigations and ascertain which additional investigations/diagnostic tests are required to complete the assessment and allow formulation of a management plan F1

Select appropriate investigations and interpret their results to stage common cancers using the tumour, node, metastasis (TNM) system or other relevant classification system

Select appropriate investigations to restage common cancer and interpret their results

Synthesize and interpret information from the clinical assessment and investigations to allow goals of care and patient-centred management plans to be established for patients across the breadth of presentations of cancer

Synthesize and interpret investigations, and order additional investigations required to complete staging and provide additional information needed to make treatment decisions c1

Identify patients who should be discussed at multidisciplinary case conferences, prepare cases for presentation, and contribute medical expertise to the decision-making process c6

Identify patients that may be eligible for clinical trials c1

Select and interpret investigations to assess for tolerance of treatment and response to therapy F2

Stage breast, colorectal, lung, and prostate cancers using the tumour, node, metastasis (TNM) system or other relevant classification system F1

Synthesize and interpret information from the clinical assessment and investigations to provide an impression F1

Synthesize and interpret information from the clinical assessment and investigations to allow goals of care and patient-centred management plans to be established for patients with common presentations of cancer

Synthesize and interpret information from the clinical assessment and investigations and implement a management plan F2

Assess a patient's suitability to proceed with systemic therapy F3 C3

2.3 Establish goals of care in collaboration with patients and their families<sup>1</sup>, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation

Describe the spectrum of goals of care in cancer treatment, including curative and palliative treatment

Identify the appropriate spectrum of goals of care for the patient based on the clinical assessment and discussion with the patient and family

Work with the patient and family to understand relevant options for care

Identify available resources to help the patient and their family understand relevant options for care, including decision aids and nomograms Establish goals of care in collaboration with patients and their families C2

Revisit goals of care in collaboration with patients and their families as their clinical condition evolves

Use available resources to help the patient and their family understand relevant options for care

Share concerns about patient goals of care that may not be achievable and initiate discussion about addressing these concerns 64

Establish goals for care when there are significant disagreements about what is achievable

2.4 Establish a patientcentred management plan Recognize, diagnose, and initiate treatment for emergencies arising from cancer or systemic therapies

Recognize urgent oncologic problems that may need the involvement of more experienced colleagues and seek their assistance immediately

Describe the resources that are available to help implement a patient-centred management plan Identify available management options based on the clinical assessment and established goals of care

Identify comorbidities and other factors that may impact management plan F1

Develop an initial evidence-based management plan that is aligned with the patient's goals of care F1 Develop and implement evidence-based and patientcentred management plans aligned with the goals of care c1 C7

Select and prescribe the appropriate dose and regimen c3

Implement required adjustments in systemic therapy and/or supportive care based on patient's health status, performance status, or co-morbidities c3

Establish a patientcentred management plan

Establish and implement patient-centred management plans for complex presentations of cancer and/or situations

Contribute medical expertise to multidisciplinary case conferences and morbidity and mortality rounds to improve care delivered by the

<sup>&</sup>lt;sup>1</sup> 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 their care, including, according to the patient's circumstances, family members, partners, caregivers, legal guardian, and substitute decision-makers.

Identify the purpose of multidisciplinary case conferences and morbidity rounds

Develop and implement a management plan aligned with the patient's preferences and goals of care F5

Select and prescribe the standard dose and regimen F3

Select and prescribe supportive care to optimize patient comfort and mitigate adverse effects F3 C3

Implement appropriate monitoring strategies F3 C3

Develop and implement initial management plans that address common symptom complexes, including infusional drug reactions, nausea and vomiting, pain, and diarrhea

Manage emergencies arising from cancer or systemic therapies

Discuss the degree of uncertainty inherent to the clinical situation F4

Participate in multidisciplinary case conferences and morbidity rounds Develop and implement management plans that address paraneoplastic syndromes

Develop and implement management plans that address multiple or complicated symptom complexes, including complex pain, malignant bowel obstruction, shortness of breath, and delirium

In collaboration with the patient and family, develop a plan to deal with clinical uncertainty

Solicit and incorporate the input of other members of the cancer care team as appropriate

Consider and recommend appropriate and available clinical trials when assessing patients for change of therapy c2 multidisciplinary and intraprofessional team

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

3.1 Determine the most appropriate procedures or therapies

Describe the indications, contraindications, risks, benefits, and alternatives for the following:

- tissue procurement (image- or endoscopically guided, surgical)
- lumbar puncture
- bone marrow aspiration and biopsy
- diagnostic paracentesis, thoracentesis, and pericardiocentesis
- systemic therapy for common presentations of cancer, including cytotoxic therapy, hormonal therapy, molecular targeted therapy, and immunotherapy
- other cancer treatment modalities, with or without systemic therapy, for common presentations of cancer
- supportive care, including blood products, and medications to prevent or reduce adverse effects or treat symptoms, as appropriate
- therapeutic procedures, including use of sclerosing agents and

Describe the indications, contraindications, risks, benefits, and alternatives for the following:

- systemic therapy for the full breadth of cancers, including cytotoxic therapy, hormonal therapy, molecular targeted therapy, and immunotherapy
- other cancer treatment modalities, with or without systemic therapy, for the full breadth of cancers
- minimally invasive procedures for relief or palliation of symptoms

Integrate all sources of information to develop a procedural and/or therapeutic plan that is safe, patient—centred, and considers the risks and benefits of all approaches for full breadth of cancers

Integrate planned procedures or therapies into global assessment and management plans for full breadth of cancers

	placement of indwelling catheters (paracentesis, thoracocentesis, pericardiocentesis)  • palliative care  Integrate all sources of information to develop a procedural and/or therapeutic plan that is safe, patient-centred and considers the risks and benefits of all approaches for common presentations of cancer  Integrate planned procedures or therapies into global assessment and management plans for common presentations of cancer		
3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy	Obtain and document informed consent, explaining the risks, benefits, and rationale while acknowledging uncertainty F3 C2 C3		
3.3 Prioritize a procedure or therapy, taking into account clinical urgency and available resources	Consider the patient's clinical status and potential for deterioration or adverse impact on goals of care (including delays in adjuvant or curative therapies) and available resources in prioritizing therapies and procedures	Prioritize therapies and procedures appropriate to both the clinical situation and the local health care system's available resources	Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources

		Advocate for the timely implementation of a patient's therapies and procedures based on urgency and available resources cs  Consider appropriate alternatives for therapies or diagnostic or therapeutic procedures based on available resources c1  Prioritize systemic cancer therapies taking into account clinical urgency and available resources	
3.4 Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances		Perform bone marrow aspiration and/or biopsy skilfully and safely Establish and implement a plan for post-procedure care  Document procedures accurately	
3.5 Provide systemic therapy for management of cancer in a time frame appropriate to the clinical situation and commensurate with the local health care system's resources	Identify the need for and manage central venous access  Prescribe systemic therapies and associated supportive medications in a skilful and safe manner, taking into account patient needs and funding models for common cancer presentations	Prescribe systemic cancer therapies in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances  Administer intrathecal chemotherapy via lumbar puncture or Ommaya reservoir	Prescribe systemic therapies and associated supportive medications in a skilful and safe manner, taking into account patient needs and funding models, for complex clinical scenarios and adapting to unanticipated findings, side effects, or changing clinical circumstances

Direct the delivery of systemic therapies

Manage the acute effects of administration of systemic therapy

Manage serious adverse events resulting from systemic therapy or complications of cancer F5

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

4.1 Implement a patientcentred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation Determine the expected response to systemic therapy for patients on active treatment

Identify toxicities seen in the patient that are attributable to systemic therapy

Describe the trajectory of care for individual cancer patients and anticipate care needs at upcoming junctures

Identify and perform the steps required to initiate the management plan F1

Provide recommendations for additional investigations and next steps in management and treatment F1

Order secondary screening and apply preventative measures for common cancers

Identify acute, subacute, long-term and/or late effects from cancer diagnosis and/or therapeutic interventions, and initiate basic management plan F2

Implement a patient-centred, evidence-based management plan based on clinical assessment c2 c5

Identify and anticipate a patient's upcoming care needs c2

Order secondary screening and apply preventative measures for the full breadth of cancers

Perform a clinical assessment, including addressing toxicities from therapeutic interventions (acute, subacute, long-term and/or late), symptoms related to cancer, and response to therapy c2

Implement a multidisciplinary patientcentred care plan that supports ongoing care

Determine, discuss, and revise plan of care at points of transition in the cancer continuum

Anticipate and recognize potential gaps in ongoing care and prevent and/or close these gaps by advocating for the patient

Propose resources to the patient and family required to implement management plan, such as assistance with transportation, assistance with accessing necessary medications

Coordinate investigation, treatment, and follow-up plans when multiple physicians and health care professionals are involved F2 F6 Evaluate patients for treatment toxicity and response, and interpret or resolve situations with uncertain, conflicting, or ambiguous data

Identify subacute, long-term, and late toxicities from therapeutic interventions across the full breadth of cancers

Determine the necessity and appropriate timing of further investigations and/or consultations c7

Refer patients to appropriate supportive care services c5

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

Establish and implement an ongoing plan for care which may include referral to a family physician; pain and symptom management/ palliative care; home care/community services; psychological and spiritual support services c4

# 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

Differentiate the following forms of harm from each other:

- outcomes of medical conditions and diseases
- complications related to inherent risks of treatments
- patient safety incidents

Recognize the occurrence of patient safety incidents, including

- prescription errors (such as wrong drug or dose)
- administration errors (such as extravasation)
- missed diagnosis (such as spinal cord compression)
- wrong diagnosis (such as histology and biomarkers that would influence treatment decisions)
- errors in handover and transition of care plans
- failure to provide timely care

Consider iatrogenic causes in the differential diagnoses of a presentation

Prioritize the initial medical response to adverse events to mitigate further injury

Report patient safety incidents to appropriate institutional representatives

Recognize and respond to patient safety incidents caused by errors in handover and transitions of care between oncology specialists c6

Identify situations in which patient safety may be a concern and coordinate with members of the health care team to respond to and prevent adverse events c9

Recognize near misses in real time and respond to correct them before they affect patient care

Optimally manage the consequences of adverse events

Participate in an analysis of patient safety incidents as opportunity arises

Identify potential opportunities for improvement that arise from harmful patient safety incidents and near misses Recognize and respond to harm from health care delivery, including patient safety incidents

Identify available tools/resources to improve health care delivery

## PATHWAY TO COMPETENCE IN MEDICAL ONCOLOGY (2022)

5.2 Adopt strategies that promote patient safety and address human and system factors

Use the reminders and clinical practice guidelines that are built into the health care records to enhance care

Follow standard procedures when ordering and/or administering systemic therapy F3

Respond to feedback on their own practice and patient outcomes

Actively encourage all involved in health care, regardless of their role, to report and respond to unsafe situations

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						
1.1 Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion	Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion	Listen to patient concerns  Provide empathic responses, as appropriate F4  Help patients feel respected and safe				
1.2 Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety	Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety					
1.3 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			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 c2			
1.4 Respond to patients' non-verbal behaviours to enhance communication	Identify, verify, and validate non-verbal cues on the part of patients and their families	Respond to patients' non- verbal communication and use appropriate non-verbal behaviours to enhance communication with patients				

	Use appropriate non-verbal communication to demonstrate attentiveness, interest, and responsiveness to patients and their families	Identify, verify, and validate cues and respond with appropriate communication techniques to establish rapport F4		
1.5 Manage disagreements and emotionally charged conversations appropriately, including discussions regarding diagnosis, prognosis, treatment, goals of care and end-of-life care	Demonstrate empathic responses for distressed patients	Respond appropriately to challenging patient encounters	Convey complex or sensitive information regarding prognosis, plan of care, change in clinical status, or uncertainty in a clear, compassionate, respectful, and accurate manner c4  Respectfully discuss differences of opinion regarding discontinuation of direct anti-cancer therapy c4  Communicate using a patient-centred approach during challenging patient encounters, including when the proposed goals of care articulated by the patient or their family cannot be achieved c2	Manage disagreements and potentially emotionally charged conversations, including diagnosis, prognosis, progressive cancer, goals of care, and end-of-life care  Adapt to unexpected circumstances
1.6 Adapt to the unique needs and preferences of each patient and to their clinical condition and circumstances	Assess how each patient's personal story impacts their unique needs and preferences F4  Explore and acknowledge each individual patient's personal story	Ascertain the patient's desire for amount and detail of information F4	Relate to the patient in a way that honours their unique needs and preferences  Explore and confirm the patient's wishes regarding advance care planning c4	Adapt communication strategy to the unique needs and preferences of each patient, including language, culture, and clinical circumstances

Tailor approaches to decision-making to the patient's expressed desire for information, capacity, values, and preferences

Adapt to the unique needs and preferences of each patient and to their 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

Conduct a patient-centred interview, gathering relevant biomedical and psychosocial information

Ascertain and address the patient's and/or the patient's family's understanding of the reason for referral and goals for the visit

Use patient-centred interviewing skills to effectively gather all relevant biomedical and psychosocial information F2

Use patient-centred interviewing skills to elicit and address the patient's understanding of their diagnosis and prognosis (including fears, concerns, and expectations of health care professionals) F1

Actively listen and respond to patient cues

Elicit the patient's understanding of their diagnosis and prognosis, including fears, concerns, and expectations of health care professionals

Use patient interviewing skills to effectively gather relevant information

Explore and address the impact of the cancer diagnosis on the patient's ability to achieve their goals, such as travelling, fertility, and working

		Integrate, synthesize, and present information about the patient's beliefs, values, context, and expectations with biomedical and psychosocial information F1  Explore the impact of the cancer diagnosis on the patient's ability to achieve their own personal goals F1 C1		
2.2 Provide a clear structure for and manage the flow of an entire patient encounter	Conduct a focused and efficient patient interview, managing the flow of the encounter while being attentive to patient cues and responses	Manage the flow of the encounter F4  Manage the flow of challenging patient encounters, including those with angry and distressed individuals who are dealing with serious and difficult news F2  Summarize and close the encounter effectively F4	Manage the flow of challenging and emotionally charged patient encounters c4	
2.3 Seek and synthesize relevant information from other sources, including the patient's family with the patient's consent	Identify when it is appropriate/necessary to seek information from other sources  Gather information from other sources with the patient's consent	Integrate and synthesize relevant information from other sources		

## 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	Participate in an information sharing session with a patient and be open to feedback about clarity and pace of the interaction	Provide effective explanations of the proposed goals of treatment and/or management F1F4  Share information in a compassionate, patient-centred, and accurate manner F4  Verify understanding of information conveyed F1F4  Recognize and adapt the discussion in response to the patient's emotional response  Recognize when to ask for assistance from a supervisor when providing explanations to the patient and family	Share information and explanations that are clear, accurate, and timely while checking for patient and family understanding  Convey information regarding diagnosis, prognosis, plan of care, change in clinical status, or uncertainty in a clear, compassionate, respectful, and accurate manner to the patient and family c1 c2	Acknowledge uncertainty when answering questions and, if possible, propose options to address that uncertainty
3.2 Disclose harmful patient safety incidents to patients and their families accurately and appropriately		Describe the steps involved in providing disclosure after a patient safety incident	Communicate the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents c2  Apologize appropriately for a harmful patient safety incident	Disclose patient safety incidents to the patient and family accurately and appropriately  Plan and document follow-up to harmful patient safety incidents

## 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	Communicate with cultural awareness and sensitivity		Facilitate discussions with the patient and family in a way that is respectful, non- judgmental, and culturally safe c2	
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			Assist the patient and their family to identify, make use of, and be aware of the limitations of information and communication technologies to support care and manage health	
4.3 Use communication skills and strategies that help patients and their families make informed decisions regarding their health		Engage the patient in shared decision-making F4  Answer questions in a way that helps patients understand their options  Discuss advance health care directives	Receive and respond to patient and family member concerns c7  Engage the patient in shared decision-making regarding enrolment in clinical trials  Use communication skills and strategies that help patients and their families make informed decisions regarding their health c7	

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, concise, complete, timely, and accessible manner, in compliance with regulatory and legal requirements	Convey the clinical encounter to a supervisor TTD1	Convey clinical reasoning and the rationale for decisions F7 C8  Document all relevant findings and investigations F7 C8  Communicate and document orders and management plan effectively F6  Organize information in appropriate sections F7 C8  Provide a clear plan for ongoing management F7 C8  Complete clinical documentation in a timely manner F7 C8	Write chemotherapy orders that are clear, accurate, and timely, using a written health record, electronic medical record, or other digital technology  Document or summarize multidisciplinary case conference discussions c6	Document clinical encounters in an accurate, concise, complete, timely, and accessible manner
5.2 Communicate effectively using a written health record, electronic medical record, or other digital technology		Communicate effectively using a written health record, electronic medical record, or other digital technology		

## PATHWAY TO COMPETENCE IN MEDICAL ONCOLOGY (2022)

5.3 Share information with patients and others in a manner that respects patient privacy and confidentiality, and enhances understanding

Assess patients' needs and preferences with respect to methods of information sharing

Describe the advantages, Limitations, and risks of using electronic communication directly with patients (including telehealth) and strategies to reduce these risks Adapt written and electronic communication to the specificity of the discipline and to the expectations of patients

Share information with patients in a way that enhances understanding

COLLABORATOR MILESTONES: RESIDENCY				
T	ransition to discipline	Foundations of discipline	Core of discipline	Transition to practice

#### 1. Work effectively with other 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

Identify and introduce oneself to the members of the cancer care team

Receive and appropriately respond to questions and input from other health care professionals F2 F6

Differentiate between task and relationship issues among health care professionals Establish and maintain healthy relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care

Solicit and respond to input from other members of the multidisciplinary team c6

Support relationshipcentred collaborative care and safe, efficient, timely and appropriate patientcentred care c9

Establish and maintain positive relationships with referring physicians in the care of patients with cancer, including active treatment in remote sites, surveillance and survivorship, and end-of-life care

Establish relationships and partnerships with physicians and other health professional colleagues, despite possible differences in opinion regarding patient management

Supervise and support care administered by other cancer care providers

1.2 Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care

Describe the roles and responsibilities of a medical oncologist and other health care professionals in the management of cancer patients

Demonstrate an understanding of the roles of interdisciplinary and interprofessional teams in Medical Oncology practice

Identify other health care professionals involved in a specific patient's care

## Work effectively with the health care team F3 C3

Recognize when situations of shared or overlapping responsibility arise over the cancer care continuum F2

Delegate or take primary responsibility when situations of shared or overlapping responsibility arise F6

Respect the diverse roles and responsibilities of other health professionals and work with them to provide patient-centred care c9

Communicate and collaborate with other health care services to facilitate patient care c7

Negotiate and clearly ascertain primary, overlapping, and shared responsibilities with physicians and other colleagues in the health care professions c1c2

Negotiate overlapping and shared care responsibilities with physicians and other health care professionals in situations requiring episodic and/or longitudinal care

Respond to the concerns of other health care professionals regarding the patient's management in a timely manner c7

Consult as needed with other health care professionals, including other physicians Help coordinate optimal patient care across medical disciplines and health care professions, while taking local resources and policies into consideration

			Share ongoing and episodic care responsibilities with physicians and other colleagues in the health care professions  Identify the roles of the referring physician and the medical oncologist clearly in the ongoing management plan cs	
1.3 Engage in respectful shared decision-making with physicians and other colleagues in the health care professions	Identify the stakeholders involved in shared decision-making  Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care	Listen, without judgment, to the perspective of those involved in the patient's care  Engage in interactions with collaborators  Communicate with other health care professionals to advocate for the timely management of the patient rs  Engage professionally with the team at the multidisciplinary case conference meetings	Effectively lead family meetings to establish a comprehensive care plan c7  Communicate effectively with physicians and colleagues in the health care professions  Contribute to and engage in respectful shared decision-making at a multidisciplinary case conference meetings to establish a care plan c6	Engage in respectful shared decision-making in complex situations where there is a difference of opinion between physicians and other health care professionals  Use referral and consultation as opportunities to improve quality of care and patient safety by sharing expertise

# 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	Convey information thoughtfully  Respond to requests and feedback in a respectful and timely manner  Demonstrate respectful behavior to fellow trainees and staff in the emergency department during interactions with them relating to disposition of oncology  Interact professionally with other health care professionals and staff in the outpatient clinic TTD1	Actively listen to and engage in interactions with collaborators  Recognize and respect diversity of expertise among health professionals F6	Delegate tasks and responsibilities in an appropriate and respectful manner  Treat collaborators in a respectful manner c9	
2.2 Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture		Identify communication barriers between health care professionals  Listen to, understand, and find common ground with collaborators  Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts	Analyze team dynamics  Gather the information and resources needed to manage differences and resolve conflicts among collaborators  Gain consensus among colleagues to resolve 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 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 F1 F2  Provide handover to other physicians or health care professionals F5	Determine when care should be transferred to another physician or health care professional  Ensure continuity of care when away or unavailable c5	Effectively coordinate transfer of care of patients at all levels of complexity in a timely fashion
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	Describe specific information required for safe and effective handover during transitions in care	Communicate with the patient's primary health care professional about the patient's care  Communicate with the receiving physicians or health care professionals during transitions in care, and clarify issues after the transfer if needed	Organize the handover of care to the most appropriate physician or health care professional c4  Provide guidance for results of outstanding investigations and/or next steps for management c8  Demonstrate safe handover of care c7	

'ATHWAY TO COMPETENCE IN MEDICAL ONCOLOGY (202	22)
	Demonstrate safe handover of care, both verbal and written, during patient transitions to a different health care professional, setting or stage of care c2
	Analyze gaps in communication between health care professionals during transitions in care
	Recognize and act on patient safety issues in the transfer of care

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 contribute to improving systems of patient care	Demonstrate an understanding of the local /regional cancer care system and institutional practices	Describe quality improvement methodologies	Contribute to the improvement of health care delivery in teams c6  Apply evidence-based practice guidelines to routine patient care  Routinely apply patient safety initiatives  Seek data to inform practice and engage in a reiterative process of improvement  • conducting a patient safety and/or quality improvement investigation  • participating in morbidity and mortality rounds  • conducting a chart review  Identify problems and potential gaps in health care delivery  Compare and contrast the traditional methods of research design with those of improvement science	Apply the science of quality improvement to contribute to improving systems of patient care  Participate in the development and implementation of patient safety initiatives		

			Compare and contrast system theory with traditional approaches to quality improvement	
1.2 Contribute to a culture that promotes patient safety		Demonstrate knowledge of institutional standards for patient safety reporting tools  Report and respond to unsafe situations	Model a just culture to promote openness and increased reporting  Actively encourage all involved in health care, regardless of their role, to report and respond to unsafe situations  Engage patients and their families in the continuous improvement of patient safety	Contribute to a culture that promotes patient safety
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 occur		Analyze harmful patient safety incidents and near misses to enhance systems of care
1.4 Use health informatics to improve the quality of patient care and optimize patient safety	Integrate data from health information systems in patient care	Describe the data available from health information systems in Medical Oncology to optimize patient care	Use data on measures of clinical performance during team discussions to support team decision-making  Utilize institutional health information systems for quality and safety improvement initiatives	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 cancer care resources for optimal patient care	Describe the costs of common diagnostic imaging and therapeutic interventions relevant to Medical Oncology, including positron emission tomography (PET) and oncotype	Recognize the financial impact of diagnostic tests and treatments F1  Describe models for resource stewardship in health care used at the institutional level	Use clinical judgment and evidence (when available) to minimize wasteful practices  Develop practice-based and system-based rules for resource allocation	Allocate health care resources for optimal patient care
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 skills to enhance health care		Take on a leadership role in the clinical, academic, or administrative setting	Contribute to a health care change initiative
		Analyze their own leadership styles, including strengths, weaknesses, and biases	

## PATHWAY TO COMPETENCE IN MEDICAL ONCOLOGY (2022)

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 Medical Oncology 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 practice and personal life	Align priorities with expectations for professional practice	Organize work using strategies that address strengths and identify areas to improve in personal effectiveness  Build relationships with mentors	Effectively manage clinical duties, including clinic flow, prioritization of cases, and delegation of duties when appropriate  Manage practice by keeping an appropriate balance between clinical responsibilities, administrative and teaching commitments	Set priorities and manage time to fulfil diverse responsibilities TTP1  Integrate supervisory and teaching responsibilities into the overall management of the clinical service TTP1
4.2 Manage a career and a practice	Review opportunities for practice preparation, including choices available for further training  Maintain a portfolio and reflect on professional development	Examine personal interests and seek career mentorship and counselling	Reconcile expectations for practice with job opportunities and workforce needs  Adjust educational experiences to gain competencies necessary for future independent practice  Describe remuneration models as they pertain to Medical Oncology	Manage a career and a practice  Plan private practice office management, including renting/buying office space, hiring MOA, billing/finances  Plan personal finances, including debt management, personal investment for retirement considering short- and long-term goals

PATHWAY TO COMPETENCE IN MEDICAL ONCOLOGY (2022)				
				Manage clinically related administrative duties, including lab work, insurance forms, follow-up calls to patients, and calls or emails to consultants
4.3 Implement processes to ensure personal practice improvement	Describe how practice standardization can improve the quality of health care		Improve personal practice by evaluating a problem, setting priorities, executing a plan, and analyzing the	Implement processes to ensure personal practice improvement

results

# HEALTH ADVOCATE MILESTONES: RESIDENCY

Foundations of discipline

#### 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 Evaluate the patient's access to third party insurance

Transition to discipline

Identify a given patient's needs (including psychosocial, financial, and vocational) for health services or resources related to their cancer diagnosis

Identify resources that address the health needs of cancer patients

Demonstrate an approach to working with patients to advocate for the health services or resources they need

Work with other health care providers to overcome barriers the patient may encounter in the health care system F6

Describe how systemic therapies are approved and funded locally, provincially, and nationally Advocate effectively for individual patients to help them overcome barriers to accessing the most effective evidence-based therapies, and receive the health services or resources they need c1 C5

Core of discipline

Work with patients and their families to identify and facilitate their access to needed health services or resources required to complete the multidisciplinary treatment plan c6

Advocate for resources and services to facilitate patient care and discharge planning c7 Work with patients to address the determinants of health and clinical trials that affect them and their access to needed cancer care services or resources

**Transition to practice** 

Advocate for resources and services for a patient if the usual avenues for access have been declined

Discuss options for addressing access to resources that are not routinely funded or available

1.2 Work with patients and their families to increase opportunities to adopt healthy behaviours Identify the behaviours that negatively impact the health of an individual patient Describe the impact of the unhealthy behaviour to the patient

Select patient educational resources related to Medical Oncology

Work with the patient and family to increase opportunities to adopt healthy behaviours c2

Identify and refer patients to resources that facilitate the adoption of healthy behaviours 1.3 Incorporate disease prevention, health promotion, and health surveillance activities into interactions with individual patients

Work with patients and families to identify opportunities for cancer prevention, health Promotion, and health protection F2

Describe the potential benefits and harms of primary or secondary screening for cancer

Identify opportunities for fertility preservation C1

Identify opportunities for testing for familial or hereditary disposition to cancer c1 Incorporate disease prevention, health promotion, and health surveillance activities into interactions with individual patients c2

Work with the patient and family to act upon opportunities for cancer prevention (including smoking cessation programs) and health promotion/protection (including surveillance for new primary or secondary cancers or for late side effects of treatment)

Evaluate with the patient the potential benefits and harms of primary or secondary screening for cancer

Counsel and refer patients regarding reproductive matters (including fertility preservation) and pregnancy following cancer treatment

Counsel patients regarding risk reducing measures if they have a familial or hereditary cancer syndrome

1.4 Propose and organize additional resources to help patients and/or their families access options for mitigating the impact of their illness and implementing the management/treatment plan, including nursing, social work, psychosocial supports, and home care services

Propose and organize additional resources to help patients and/or their families access options for mitigating the impact of their illness and implementing the management/treatment plan, including nursing, social work, psychosocial supports, and home care services

# 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

Identify communities or populations with higher incidence/prevalence of cancer because of environmental/ occupational exposures, genetic factors, or barriers or inequities in accessing care and resources

Analyze current cancer control policies or policy developments that affect the communities or populations they serve

Work with a community or population to identify the most important determinants of cancer control that affect them

Identify avenues to rectify discrepancies

2.2 Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities				Identify gaps and lobby for resources needed to provide optimal care to the community and population they serve
2.3 Contribute to a process to improve health in the community or population they serve	Describe the organizational structure of local, provincial/territorial, and national cancer care systems	Identify barriers that prevent physicians from providing appropriate care	Identify opportunities within the system to remove barriers or support physicians in providing appropriate care  Partner with others to identify the health needs of the community or population they serve	Identify opportunities for patient and/or physician advocacy within local, provincial/territorial, and national cancer care systems
2.4 Demonstrate an understanding of the structures of local, provincial/territorial, and national cancer care systems, and identify opportunities for patients and/or physician advocacy within those systems			Demonstrate an understanding of the structures of local, provincial/territorial, and national cancer care systems, and identify opportunities for patients and/or physician advocacy within those systems	

	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					
1.1 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	Describe medical oncologists' obligations for lifelong learning and ongoing enhancement of competence	Create a learning plan in collaboration with a designated supervisor and others as needed, and identify learning needs related to Medical Oncology  Use technology to develop, record, monitor, revise, and report on learning in Medical Oncology  Demonstrate a structured approach to monitoring progress of learning in the clinical setting, and establish an e-portfolio	Review and update earlier learning plan(s) with input from others, and identify learning needs within all the CanMEDS Roles and Milestones to generate immediate and longer-term career goals	Devise and implement 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	Identify important questions that arise in the assessment and management of cancer patients, and use independent resources to increase knowledge base and address clinical problems, including ASCO, ESMO, and updates in oncology	Regularly engage in personal learning by drawing upon various sources (including daily work, literature, and formal or informal education sessions) to identify and prioritize learning needs  Identify and record learning needs that arise in daily work, and apply strategies to address those gaps	Seek and interpret multiple sources of performance data and feedback (with guidance) to identify opportunities for learning and improvement  Prioritize and respond to learning needs that arise in daily work  Seek help or pursue learning opportunities after reaching limits of current expertise		

		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	Identify the learning needs of a health care team	Demonstrate an understanding of the utility of practice audits  Provide teaching points to improve quality of care c8	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	Identify behaviours associated with positive and negative role-modelling	Use strategies for deliberate positive role-modelling	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	Explain how power differentials between learners and teachers can affect the learning environment		Ensure a safe learning environment for all members of the team
2.3 Ensure patient safety is maintained when learners are involved	Identify unsafe clinical situations involving learners and manage them appropriately	Supervise learners to ensure they work within limitations, seeking guidance and supervision when needed	Ensure patient safety is maintained when learners are involved

			Balance clinical supervision and graduated responsibility, ensuring the safety of patients and learners	
2.4 Plan and deliver learning activities		Choose appropriate content, teaching format, and strategies, and tailor them to a specific educational context, including teaching in the clinic or didactic sessions	Plan and deliver a learning activity  Describe sources of information to assess learning needs  Define learning objectives for a teaching activity	
2.5 Provide feedback to enhance learning and performance	Describe the key elements of constructive feedback	Provide written or verbal feedback to other learners, faculty, and other members of the team	Act as a role model by seeking feedback and engaging in regular self-assessment	Provide feedback to enhance learning and performance
2.6 Assess and evaluate learners, teachers, and programs in an educationally appropriate manner			Appropriately assess junior learners, teachers, and educational programs	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	Recognize uncertainty and knowledge gaps in clinical and other professional encounters relevant to Medical Oncology	Generate focused questions that can address practice uncertainty and knowledge gaps c1 c2	
3.2 Identify, select, navigate, and recognize limitations of pre-appraised resources	Assess the quality of various pre-appraised resources  Identify and determine the applicability of a particular pre-appraised resource in a specific clinical setting		

3.3 Critically evaluate the integrity, reliability, and applicability of health-related research and literature	Know the definitions and basic methodology of the various study designs used in Medical Oncology	Compare and contrast the various study designs used in Medical Oncology  Interpret study findings and critique their relevance to Medical Oncology practice  Determine the validity and risk of bias in a source of evidence	Critically evaluate the integrity, reliability, and applicability of health-related research and literature c1 c2  Evaluate the applicability (external validity or generalizability) of evidence from various resources, including new study designs which incorporate genomic and translational data  Describe study results (including median survival, hazard ratios, relative risk reduction, absolute risk reduction, clinical significance, and risk benefit ratios) in both quantitative and qualitative terms	
3.4 Integrate evidence into decision-making in their practice		Describe how various sources of information, including studies, expert opinion, and practice audits, contribute to the evidence base of Medical Oncology practice  Discuss the barriers to and facilitators of applying evidence into practice	Identify new evidence through quality-appraised evidence-alerting services  Integrate best evidence and clinical expertise into decision-making c8  Integrate best available evidence into the multidisciplinary management plan c6	Integrate best evidence and clinical expertise into decision-making in their practice

Recognize when the best available evidence is limited or of poor quality and develop a strategy to deal with it, including determining optimal treatments for rare tumors or under-represented populations c1

Explain how various scholarly sources, such as studies, expert opinion, and audits, inform 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

Discuss the roles and responsibilities of researchers, both principal investigators and collaborators, and how they differ from the roles and responsibilities of clinical care

Contribute to a scholarly investigation or the dissemination of research findings in Medical Oncology

Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care c2

4.2 Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations	Discuss and provide examples of the ethical principles applicable to health research and scholarly inquiry relevant to Medical Oncology		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	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	Demonstrate awareness of available clinical trials, and promote patient enrollment, as appropriate	
4.4 Pose questions amenable to scholarly investigation and select appropriate methods to address them	Describe and compare the common methodologies used for scholarly inquiry in Medical Oncology	Select appropriate methods of addressing a given scholarly question  Discuss and critique the possible methods of addressing a given scholarly question	Pose medically and scientifically relevant and appropriately constructed questions amenable to scholarly investigation  Participate in a research or scholarly project relevant to Medical Oncology
4.5 Summarize and communicate to professional and lay audiences, including patients and their families, findings of relevant research and scholarly work	Summarize and communicate to peers the findings of applicable research and scholarship		Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry

PATHWAY TO COMPETENC	E IN MEDICAL ONCOLOGY (2	022)	
			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

Prioritize the needs of patients to ensure their needs are met

Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met

Treat patients and families with respect

# Demonstrate punctuality TTD1

Complete assigned responsibilities

Maintain the confidentiality of patients under their care

Identify breaches of confidentiality

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

Behave in a professional and respectful manner c7

Intervene when behaviours toward colleagues and learners undermine a respectful environment

Model a commitment to excellence in all aspects of practice

Exhibit appropriate

practice

professional behaviours and

relationships in all aspects of

1.2 Demonstrate a commitment to excellence in all aspects of practice

Demonstrate a commitment to excellence in all aspects of practice

Analyze how the system of care supports or jeopardizes excellence

1.3 Recognize and respond to ethical issues encountered in research and in caring for patients with cancer		Recognize and respond to ethical issues, including  truth telling/full disclosure regarding issues, including near misses and medical errors  informed decision-making/consent  end-of-life care  medical assistance in dying (MAID)  inequities in accessing cancer care	Manage ethical issues encountered in the clinical and academic setting, including issues surrounding funding of cancer therapies and technologies and conflicts of interest	Identify and manage ethical issues in all aspects (clinical, research, teaching and administration) of practice
1.4 Recognize and manage conflicts of interest		Identify different types of 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	Describe how to use technology-enabled communication professionally		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		Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources	Demonstrate a commitment to the promotion of the public good in health care, including stewardship of resources  Maintain and continually enhance competence	Demonstrate accountability to patients, society, and the profession by recognizing and responding to societal expectations of the profession  Manage the tension between societal and physicians' expectations
2.2 Demonstrate a commitment to patient safety and quality improvement	Identify situations when an individual patient's safety is at risk		Identify situations when systemic issues compromise the safety of a group of patients  Identify situations when systemic issues compromise the safety of patients undergoing multidisciplinary care c6	Demonstrate a commitment to patient safety and quality improvement

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

3.1 Fulfil and adhere to professional and ethical codes, standards of practice, and laws governing practice	Fulfil and adhere to the professional and ethical standards of practice	Describe the relevant codes, policies, standards, and laws governing physicians and the profession, including standard setting and disciplinary and credentialing procedures		Describe how to respond to, cope with, and constructively learn from a complaint or legal action  Fulfil and adhere to the 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	Identify and respond to lapses in professional conduct by peers		Identify the appropriate regulatory body's codes and procedures relevant to investigating a case of serious unprofessional behaviour or practice	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			Prepare a morbidity and mortality report or chart review  Participate in the assessment of junior learners	Participate in the review of practice, standard setting, and quality improvement activities  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	Describe the difference between self-reflection and rumination	Manage the impact of physical and environmental factors on performance  Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks	Integrate skills that support adaptation and recovery in challenging situations	Exhibit self-awareness and effectively manage influences on personal wellbeing and professional performance
4.2 Manage personal and professional demands for a sustainable practice throughout the physician life cycle	Describe strategies to manage the stress inherent in the transition from Internal Medicine to Medical Oncology training	Describe the influence of personal and environmental factors on the development of a career plan	Demonstrate strategies to manage competing personal and professional priorities  Using personal examples, reflect on the risk of compassion fatigue and burnout and use strategies to mitigate this risk	Demonstrate strategies to manage personal and professional demands for a sustainable practice throughout the physician life cycle
4.3 Promote a culture that recognizes, supports, and responds effectively to colleagues in need	Recognize when colleagues are in need	Demonstrate compassion and support to colleagues in need  Use strategies to mitigate the impact of patient safety incidents	Support others in their professional transition	Promote a culture that recognizes, supports, and responds effectively to colleagues in need  Provide mentorship to colleagues