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# Pathway to Competence: Surgical Foundations

Attached to this PDF is a printable Table of Contents

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### The Pathway to Competence: Understanding its origins and purpose

Every discipline that transitions to Competence by Design (CBD) develops a Pathway to Competence document (the pathway) as part of the discipline's CBD educational standards suite. The pathway helps to highlight the foundational connection between CanMEDS and the rest of the CBD design, including stages of training, milestones and EPAs.

The pathway illustrates the progression of a resident's competence through 4 stages of training in a given discipline or special program. These stages include Transition to Discipline, Foundations of Discipline, Core of Discipline, and Transition to Practice. The pathway presents the CanMEDS milestones (observable markers) that the resident must acquire in order to attain the exit competencies outlined in the Discipline Competencies.

### Using the Pathway to Competence: Curriculum mapping and learning plans

The material in this document is subject to change. It is the user's responsibility to ensure that he/she is using the latest version, which is accessible via the [Royal College's website](#).

The pathway document can be used to:

- Build a curriculum map  
*[Program directors, clinician educators, educational designers, curriculum planners]*
  - describe the skills to be developed at each stage of training;
  - identify those milestones likely to be observed as part of the work based assessment program; and
  - identify those skills that may need additional learning experiences at each stage of training.
- Create individualized learning plans
  - identify why a resident might be struggling and what skills the resident needs to progress along the competence continuum *[Advisors/supervisors; program directors]*; and
  - project an educational roadmap that helps residents identify their own learning objectives. *[Learners]*

Please note that this may not be an exhaustive list of uses and/or users. The pathway document is relatively new to Canadian residency training and, as a result, it is too early to know all of the different ways that people will use it. If you use this document in other ways, please consider letting us know so we can share this with others.

Contact us at [cbd@royalcollege.ca](mailto:cbd@royalcollege.ca) if you have any questions or comments about this document.

### Understanding the structure and format of the Pathway to Competence document

The *Pathway to Competence* is presented as a chart with the competencies, organized by CanMEDS Role, appearing down the *y-axis*, and the stages of training as columns along the *x-axis*. Each row displays the milestones for the associated enabling competency, allowing readers to see a progression across stages. Ultimately, the *Pathway to Competence* also allows for customized isolated views. For example, a preceptor can see all of the Medical Expert milestones that a resident must achieve in the Core of Discipline stage, or she can view the ideal progression for just one particular key competency (e.g. handover).

The following information provides guidance on navigation and interpretation of the various elements of this technical document.

- When working with the electronic version of the pathway, you will find a navigation bar on the left hand side of the PDF. This will support quick and easy transition between sections of the document.
- The Medical Expert Role tends to have the most specialty specific content, which is why it tends to be the longest section of the pathway.
- You will find that there is some discipline-specific customization at the enabling competency level and significant discipline-specific customization at the milestone level.

The following examples highlight some of the different elements of the pathway and should help users navigate through the document.

**Example 1- Cardiac Surgery**

1. MEDICAL EXPERT MILESTONES: RESIDENCY					
	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice	
2.	3. Plan and perform procedures and therapies for the purpose of assessment and/or management				
3.	3.1. Determine the most appropriate procedures or therapies	Describe the contraindications and, risks for a sternotomy	<p>5.</p> <p><b>Describe</b> the indications, contradictions, risks, and alternatives for a given procedure or therapy</p> <p><b>Gather/</b> assess required information to reach diagnosis and determine correct procedure required</p> <p>contraindications, risks, and alternatives for a given procedure or therapy</p> <p>Gather/assess required information to reach diagnosis and determine correct procedure required</p>	<p><b>Integrate</b> 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 <b>including</b>, as appropriate, surgical or other therapeutic procedures and myocardial protection</p> <p>Integrate planned procedures or therapies into global assessment and management plans</p> <p><b>Review</b> and revise as appropriate, the plan for surgical approach, conduit vessel and/or myocardial protection</p> <p><b>Select</b> appropriate procedure and/or device for heart failure patients</p> <p>Continually monitor the appropriateness of continuing or varying therapies, including discontinuing therapies</p>	<p>Determine the most appropriate procedures or therapies for the purpose of assessment and/or management</p> <p><b>Select</b> appropriate materials and equipment</p> <p><b>Determine</b> the patient's eligibility and suitability for ECMO</p>
				<p>4.</p> <p>6-7.</p> <p>Fib</p> <p>C3 C6a C30</p> <p>C1a</p> <p>Oscore: F 9, F 10, C 6b, C 11, C 12, C 13, C 14, C 15, C 16, C 17, C 18, C 19, C 20, C 21, C 22, C 23, C 24, C 25, C 26, C 27, TTP 4</p> <p>TTP3</p> <p>TTP1a</p> <p>C10</p> <p>C3</p>	

1. **CanMEDS Role:** At the highest level, the competencies in the pathway document are organized by CanMEDS Role. There are 7 sections in the Pathway to Competence Document (i.e. 1 per CanMEDS Role)
2. **Key Competencies:** Under each CanMEDS Role you will find a series of key competencies.
3. **Enabling Competencies:** Under each key competency there are a number of sub-competencies, known as enabling competencies.
4. **Stages:** In CBD, the [Competence Continuum](#) includes four stages of training: Transition to Discipline, Foundations of Discipline, Core of Discipline, and Transition to Practice. The 4 stages are presented as columns along the x-axis of the table
5. **Milestones:** In CBD, milestones are written to describe the markers of an individual ability in relation to a CanMEDS enabling competency. The milestones are stage specific, which means that a trainee within that particular stage should be working to develop and demonstrate competence at this level for this enabling competency.
6. **EPA Tags:** Throughout the document there are a series of comment boxes, which function as EPA tags. These tags tell you which EPAs use this milestone (in other words, which tasks use this ability); from the perspective of teaching and learning, this tag tells you under which EPAs that milestone will be observed.
  - Not every milestone is tagged to an EPA. You should be mindful of the tagging / lack of tagging in the context of curriculum mapping. If there's a tag, there is a good chance that the milestone will be taught/observed in a clinical setting. If there are no tags, then you will want to ensure the content is covered in other educational experiences.
  - Note: each tag starts off with "Comment [XX#]". This information is generated automatically during document development. You can ignore this information as it is irrelevant from a user's perspective.
7. **Tagging convention:** The EPAs are tagged with a particular naming convention (i.e. letters followed by numbers).
  - The letters refer to the stage of training.
    - TTD = Transition to discipline
    - F = Foundation of training
    - C = Core of training
    - TTP = Transition to practice
  - The numbers following the letters refer to the number of the EPA in that particular stage.
  - Some EPAs are bolded. This bolding is a visual cue to indicate that this particular milestone is incorporated in the EPA's observation form.
  - Some EPAs include OSCORE in the tag. These milestones are common to an observation form used for surgical procedures, and therefore represent common skills for a surgical discipline.

- Some EPA include an a or b in the tag. This refers to EPAs in which the observation plan has multiple parts. (e.g. part (a) is about clinical assessment and part (b) is about multisource feedback)
8. **Coding for adult/pediatric streams:** In some cases, there may be a letter after the number (i.e. an A or P). the letter refers to the stream within the discipline to which this item is applicable (e.g. a milestone with a code of TTP1AP means that this milestone is evaluated in EPA 1 of Transition to Practice and the milestones is applicable to both the adult and pediatric stream).

**Example 2- Nephrology**

1. MEDICAL EXPERT MILESTONES: RESIDENCY				
	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
2.	2. Perform a patient-centred clinical assessment and establish a management plan			
3.	2.1. Prioritize issues to be addressed in a patient encounters	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	Prioritize which issues need to be addressed	4.
6-7-8.			Identify clinical emergencies and prioritize response	
			Identify indications to investigate for secondary hypertension	
				5.

C10Aa/13Pa, C11Aa/14Pa  
C4A/C5P, C15A/18P  
C3APa

Effective for residents who enter training on or after July 1<sup>st</sup> 2018

**MEDICAL EXPERT MILESTONES: RESIDENCY**

Transition to discipline

Foundations of discipline

**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
1.2. Integrate the CanMEDS Intrinsic Roles into their practice	Explain how the Intrinsic Roles need to be integrated in surgical practice to deliver optimal patient care	
1.3. Apply knowledge of the clinical and biomedical sciences relevant to Surgical Foundations	Apply knowledge of the different tubes, drains and lines used in the care of the surgical patient, the indications for their use and the risks associated with them	Apply clinical and biomedical sciences to manage core patient presentations in surgical practice Apply knowledge of anatomy relevant to the surgical site
1.4. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner		Perform focused clinical assessments with recommendations that are well-documented Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately
1.5. Carry out professional duties in the face of multiple competing demands		On the basis of patient-centered priorities, seek assistance to prioritize multiple competing tasks that need to be addressed

Comment [FV2]: F 1 a, F 3, F 6, F 7 a, F 8, F 9

Comment [FV1]: TTD 7

Comment [FV3]: F 6

Comment [FV4]: F 2, F 3, F 7 a, F 8

Comment [FV5]: F 1 a, F 2, F 6, F 8

Comment [FV6]: F 1 a

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SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

<p>1.6. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in surgical practice</p>	<p>Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making</p> <p>Recognize own limits and seek assistance when necessary</p>	<p>Develop a plan that considers the current complexity, uncertainty, and ambiguity in a clinical situation</p>
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Comment [FV7]: TTD 1

Comment [FV8]: TTD 2

**MEDICAL EXPERT MILESTONES: RESIDENCY**

Transition to discipline

Foundations of discipline

**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>Identify the concerns and goals of the patient and family for the encounter</p> <p>Identify patients at risk for sudden deterioration in clinical status requiring closer follow-up</p> <p>Perform the Airway Breathing and Circulation (ABC) protocol</p> <p>Perform initial resuscitation according to ACLS guidelines</p> <p>Demonstrate situational awareness</p>	<p>Iteratively establish priorities as the patient's situation evolves</p> <p>Prioritize the clinical assessment of a patient with traumatic injury following ATLS guidelines</p>
<p>2.2. Elicit a history, perform a physical exam that is relevant, concise and accurate to context; select appropriate investigations; and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion</p>	<p>Elicit a history and perform a physical exam that informs the diagnosis</p> <p>Develop a differential diagnosis and adjust as new information is obtained</p> <p>Select necessary initial investigations to assist in diagnosis and management</p>	<p>Develop a specific differential diagnosis relevant to the patient's presentation</p> <p>Select and/or interpret appropriate investigations and/or imaging with sufficient attention to clinical details</p> <p>Interpret common and simple investigational modalities:</p> <ul style="list-style-type: none"> <li>• Plain chest X-ray</li> <li>• Plain views of the abdomen</li> </ul>

Comment [FV9]: TTD 1

Comment [FV12]: F 2

Comment [FV10]: TTD 4

Comment [FV11]: TTD 2

Comment [FV13]: TTD 1 , TTD 2

Comment [FV16]: F 1 a, F 2 , F 3, F 8

Comment [FV14]: TTD 2

Comment [FV17]: F 1 a, F 3, F 8

Comment [FV15]: TTD 2

Comment [FV18]: F 1 a



		<ul style="list-style-type: none"> <li>• Common cross-sectional imaging</li> <li>• Routine imaging in trauma</li> <li>• Ultrasound</li> <li>• Electrocardiogram (ECG)</li> </ul>
<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 patients and their families 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>2.4. Establish a patient-centred management plan</p>	<p>Develop an initial management plan for common patient presentations in surgical practice</p> <p>Use appropriate prophylaxis:</p> <ul style="list-style-type: none"> <li>• Antibiotic</li> <li>• Immunization, including tetanus</li> </ul> <p>Develop a management plan for common presentations related to tubes, drains and lines</p>	<p>Develop and implement initial management plans for common problems in surgical practice</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, addressing fears and concerns</p> <p>Discuss clinical uncertainty with the patient and family</p> <p>Develop and implement plans for pre-operative optimization of patients:</p> <ul style="list-style-type: none"> <li>• Burns and thermal injuries</li> <li>• Cardiac disease             <ul style="list-style-type: none"> <li>○ Arrhythmias</li> <li>○ Heart failure</li> <li>○ Ischemic heart disease</li> <li>○ Valvular heart disease</li> </ul> </li> <li>• Disorders of hemostasis; congenital and acquired</li> <li>• Endocrine disease             <ul style="list-style-type: none"> <li>○ Adrenal</li> <li>○ Diabetes</li> </ul> </li> </ul>

Comment [FV19]: F 4

Comment [FV22]: F 1 a

Comment [FV20]: TTD 1

Comment [FV23]: F 4

Comment [FV21]: TTD 7

Comment [FV24]: F 4

Comment [FV25]: F 3

- Thyroid
- Patient with immunosuppression
  - Chronic disease states
  - Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV/AIDS)
  - Secondary to medications
  - Post-transplant
- Infections
- Liver disease
  - Cirrhosis and its complications
- Malnutrition
- Morbid obesity
- Pregnancy
- Pulmonary disease
  - Respiratory failure
  - Chronic obstructive lung disease (COLD)
  - Sleep apnea
- Renal disease
  - Acid-base and electrolytes disorders
  - Renal dysfunction
- Shock of all types
- Trauma/thermal injury (according to ATLS protocols)

Manage unexpected peri-operative bleeding (both surgical and nonsurgical)

Use appropriate prophylaxis:

- Antibiotic
- Thromboembolic
- Immunization

Comment [FV26]: F 1 a

Comment [FV27]: TD 6, F 3, F 5 a

**MEDICAL EXPERT MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**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>Inform the patient and family concerning alternatives for operative and non-operative care</p> <p>Gather and/or assess required information to determine the procedure required</p>	<p><b>Comment [FV28]: F 3</b></p> <p><b>Comment [FV29]: F 1 b</b></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>Describe the ethical principles and legal process of obtaining and documenting informed consent</p> <p>Obtain and document informed consent for simple wound closure</p>	<p>Obtain informed consent for commonly performed procedures and therapies, under supervision</p> <p>Assess patients' decision-making capacity</p>	<p><b>Comment [FV30]: TTD 1</b></p> <p><b>Comment [FV32]: F 3, F 4</b></p> <p><b>Comment [FV33]: F 3, F 4</b></p> <p><b>Comment [FV31]: TTD 6</b></p>
<p>3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources</p>	<p>Recognize and discuss the importance of the triaging and timing of a procedure or therapy</p> <p>Determine the priority with which various problems with in-situ tubes, drains and lines require intervention</p>	<p>Consider urgency and potential for deterioration, in advocating for the timely execution of a procedure or therapy</p>	<p><b>Comment [FV34]: TTD 1</b></p> <p><b>Comment [FV36]: F 1 a, F 2, F 3, F 8</b></p> <p><b>Comment [FV35]: TTD 7</b></p>
<p>3.4. Perform procedures in a timely, skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances</p>	<p>Demonstrate effective procedure preparation, including the use of a pre-procedure time-out or surgical safety checklist as appropriate</p> <p>Set up and position the patient for a procedure</p> <p>Perform pre-procedural tasks in a timely, skillful,</p>	<p>Perform pre-procedural tasks in a timely, skillful, and safe manner</p> <ul style="list-style-type: none"> <li>Apply aseptic technique for all procedures</li> <li>Gather and manage the availability of appropriate instruments and materials for minor procedures</li> </ul>	<p><b>Comment [FV59]: F 2</b></p> <p><b>Comment [FV60]: F 5 a</b></p> <p><b>Comment [FV37]: TTD 5</b></p> <p><b>Comment [FV61]: F 5 a</b></p> <p><b>Comment [FV38]: F 1 b</b></p>

and safe manner

- Ensure maintenance of sterility
- Maintain universal precautions
- Ensure safe handling of sharps
- Hand-cleanse, gown and glove

Perform pre-procedural tasks for a simple wound closure

- Apply aseptic technique
- Gather and manage the availability of appropriate instruments and materials for minor procedures
- Obtain appropriate assistance
- Position the patient appropriately
- Prepare the operative site
- Hand-cleanse, gown and glove
- Demonstrate appropriate draping of the patient
- Deliver pre-procedural local anesthesia if appropriate

Perform procedural tasks in a timely, skillful and safe manner:

- Use common surgical instruments, including but not limited to needle drivers, retractors, forceps, clamps, and scissors
- Select and use suture materials
- Assess the quality of the closure

- Obtain appropriate assistance
- Position the patient appropriately
- Mark appropriate side/site
- Prepare the operative site
- Cleanse the operative site
- Demonstrate appropriate draping of the patient
- Deliver pre-procedural local anesthesia, if appropriate

Perform procedural tasks in a timely, skillful, and safe manner:

- Use common surgical instruments, including but not limited to needle drivers, retractors, forceps, clamps, electrocautery, scalpel, and scissors
- Provide operative assistance
  - Demonstrate how to provide operative assistance as necessary for the safe and effective performance of operative procedures
  - Take direction from a lead surgeon
- Use operative assistance appropriately
  - Recognize when to use operative assistance as necessary for the safe and effective performance of operative procedures
  - Demonstrate an understanding of personal technical limitations
  - Direct assistants
- Select and use suture materials
- Select and use drains and tubes, as appropriate

Comment [FV39]: TTD 5

Comment [FV40]: TTD 5

Comment [FV62]: F 5 a

Comment [FV41]: TTD 5, F 5 a

Comment [FV63]: F 5 a

Comment [FV42]: TTD 5

Comment [FV64]: F 5 a

Comment [FV43]: TTD 5, F 5 a

Comment [FV65]: F 5 a

Comment [FV66]: F 5 a

Comment [FV44]: TTD 6

Comment [FV67]: F 5 a

Comment [FV45]: TTD 6

Comment [FV46]: TTD 6

Comment [FV68]: F 5 a, F 6

Comment [FV69]: F 5 a, F 6

Comment [FV47]: TTD 6

Comment [FV48]: TTD 6

Comment [FV49]: TTD 6

Comment [FV70]: F 6

Comment [FV50]: TTD 6

Comment [FV51]: TTD 6

Comment [FV52]: TTD 6

Comment [FV71]: F 6

Comment [FV53]: TTD 6

Comment [FV54]: TTD 6

Comment [FV72]: F 6

Comment [FV55]: TTD 6

Comment [FV73]: F 6

Comment [FV56]: TTD 6

Perform common procedures in a skillful, fluid and safe manner

- Unblock tubes and/or drains
- closure of simple wounds

Perform surgical techniques in a timely, skillful, and safe manner:

- Incision using sharp and energy-based instruments
- Blunt and sharp dissection without injury to adjacent structures
- Tissue handling with attention to the preservation of tissue vitality
- Vascular control in elective and critical situations
- Hemorrhage control – pack , apply pressure (simple bleeding)
- Knot tying and suturing
- Closure of layered incision
- Insertion and removal of drains
- Selection and application of a wound dressing
- Insertion of a urethral catheter
- Insertion of a nasogastric tube
- Application of a tourniquet
- Application of a splint for bony injury or soft tissue injury
- Drainage of a superficial abscess
- Biopsy
- Securing arterial and venous vascular access in critical and non-critical situations
- Debridement of pressure sore or foot ulcer

Perform common procedures in a skillful, fluid and safe manner :

- Needle thoracostomy
- Tube thoracostomy

Comment [FV57]: TTD 7

Comment [FV58]: TTD 7

Comment [FV74]: F 2 , F 6

Comment [FV75]: F 6

Comment [FV76]: F 6

Comment [FV77]: F 6

Comment [FV78]: F 2

Comment [FV79]: F 6

Comment [FV80]: F 6

Comment [FV81]: F 6

Comment [FV82]: F 6

Comment [FV83]: F 2

Comment [FV84]: F 2

Comment [FV85]: F 1 b

Comment [FV86]: F 1 b

Comment [FV87]: F 1 b

- Central venous line access
- Surgical airway:
  - Needle cricothyroidotomy
  - Cricothyroidotomy or tracheostomy

Perform post-procedural tasks in a timely, skillful, and safe manner:

- Prepare and handle specimens for intra-operative consultation with a pathologist
- Use appropriate specimen collection techniques, including choosing correct specimen container and fixative/preservative
- Perform appropriate wound surveillance and dressing care

Seek assistance as needed when unanticipated findings or changing clinical circumstances are encountered

Establish and implement a plan for post-procedure care

Comment [FV88]: F 1 b

Comment [FV89]: F 1 b

Comment [FV90]: F 5 a, F 7 a

Comment [FV91]: F 5 a

Comment [FV92]: F 5 a, F 7 a

Comment [FV93]: F 1 b

**MEDICAL EXPERT MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

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

4.1. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation

Identify the potential need for **consultation**

Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are **involved**

Ensure follow-up on results of investigation and response to **treatment**

Apply standardized care paths, including patient education **components**

Implement a post-operative care plan for patients with an uneventful post-operative **course**

Implement a post-operative care plan for patients with a complicated post-operative **course**

- Fever
- Cardiac disorders
  - Arrhythmias
  - Heart failure
  - Ischemia
- Gastrointestinal disease:
  - GI bleeding
  - Ileus
- Pulmonary disease
  - Aspiration pneumonia
  - Hospital-acquired pneumonia
  - Pneumothorax

**Comment [FV94]: TTD 2**

**Comment [FV95]: F 1 a, F 3, F 7, F 8**

**Comment [FV96]: F 7 a, F 8**

**Comment [FV97]: F 4**

**Comment [KJ98]: F 7 a**

**Comment [KJ99]: F 8**

- Pulmonary embolus
- Respiratory failure
- Renal disease:
  - Acid-base and electrolyte disorders
  - Oliguria; anuria
  - Renal failure
- Vascular disease:
  - Deep venous thrombosis
- Sepsis associated with
  - Catheter
  - Superficial surgical site infection
  - Deep surgical site infection
- Compartment syndromes
  - Abdominal
  - Limb
- Fat embolism
- Pressure sores

Establish plans for ongoing care, taking into account the patient's clinical state as well as available resources

Implement management to stabilize the patient prior to additional testing or transfer

Identify the needs of the patient and appropriately consult other health professionals as indicated

Comment [FV100]: F 2

Comment [FV101]: F 2

Comment [FV102]: F 8



**MEDICAL EXPERT MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**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**

<p>5.1. Recognize and respond to harm from health care delivery, including patient safety incidents</p>	<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>Demonstrate an understanding of the steps to take when there has been a break in universal precautions or sterility <u>contamination</u></p> <p>Prevent complications that stem from operative <u>positioning</u></p> <p>Recognize the occurrence of a patient safety <u>incident</u></p>
<p>5.2. Adopt strategies that promote patient safety and address human and system factors</p>	<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 <u>safety</u></p> <p>Describe strategies to address human and system factors on clinical practice</p> <p>Apply an error prevention system in the operating room</p>

Comment [FV103]: F 5 a

Comment [FV104]: F 5 a

Comment [FV105]: F 8

Comment [FV106]: F 3 , F 5 a, F 7

**COMMUNICATOR MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**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, privacy, engagement, and safety</p>	<p>Optimize the physical environment for patient comfort, privacy, engagement, and safety</p>
<p>1.3. Recognize when the perspectives, values, or biases of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly</p>	<p>Respect diversity and differences in decision-making, including but not limited to those that arise as an impact of:</p> <ul style="list-style-type: none"> <li>• Age</li> <li>• Cultural beliefs</li> <li>• Family composition</li> <li>• Gender and gender identity</li> <li>• Religion</li> <li>• Sexual orientation</li> <li>• Socioeconomic status</li> </ul>	
<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>	

Comment [FV107]: TTD 1

Comment [FV109]: F 2 , F 4

Comment [FV108]: TTD 1, TTD 2

<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 challenging conversations:</p> <ul style="list-style-type: none"> <li>• Addressing anger, confusion and misunderstanding</li> <li>• Cultural differences</li> <li>• Language barriers</li> <li>• Delivering bad news</li> <li>• Disclosing adverse events</li> <li>• Discussing end-of-life care</li> <li>• Discussing organ donation</li> <li>• Differing abilities (hearing loss, vision loss, education, etc.)</li> </ul>
<p>1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances</p>		<p>Encourage discussion, questions, and interaction to validate understanding during the encounter</p>

Comment [VF110]: F 4

Comment [FV111]: F 3 , F 4,

**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 identify and 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>Identify and effectively explore issues to be addressed in a surgical patient encounter, including but not limited to the patient's context and preferences which include items to be addressed such as age, ethnicity, gender, family, and religious beliefs</p>	
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Comment [FV112]: TTD 1

Comment [FV113]: TTD 1

Comment [FV114]: TTD 1

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

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 the patient's cues and responses	
2.3. Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent	Seek and synthesize relevant information from other sources, including the patient's family, hospital records and other health care professionals, with the patient's consent	

Comment [FV115]: TTD 1

Comment [FV116]: TTD 1, TTD 2, TTD 3

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

3.1. Share information and explanations that are clear, accurate, and timely while checking for patient and family understanding	<p>Obtain appropriate consent for sharing information</p> <p>Communicate the 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>Plan and discuss appropriate post-operative care and issues with patients and families</p>	<p>Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, management plan and/or discharge plan</p> <p>Plan and discuss appropriate post-operative, immediate and/or long-term care and issues with patients and families as appropriate</p>
3.2. Disclose harmful patient safety incidents to patients and their families accurately and appropriately		Describe the steps in providing disclosure after a patient safety incident

Comment [FV119]: F 3 , F 7a, F 8

Comment [FV117]: TTD 7

Comment [FV120]: F 4 F 7a, F 8

Comment [FV118]: TTD 6

Comment [FV121]: F 8

**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	Conduct an interview, demonstrating cultural awareness	<p>Explore the perspectives of the patient and others when developing care plans</p> <p>Communicate with cultural awareness and sensitivity</p>
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Comment [FV122]: F 4

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

4.2. Assist patients and their families to identify, access, and make use of information and communication technologies to support their care and manage their health		
4.3. Use communication skills and strategies that help patients and their families make informed decisions regarding their health	Encourage discussion, questions, and interaction in the encounter	Answer questions from the patient and family about next steps

Comment [FV123]: F 7a

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

5.1. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements	<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 an initial management plan for common patient presentations in surgical practice</p>	<p>Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care</p> <p>Prepare recommendations in written and/or verbal form in response to a request from another health care professional</p> <p>Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions</p> <p>Document operative procedures to adequately convey clinical findings, reasoning and the rationale for decisions</p>
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Comment [FV124]: TTD 1 , TTD 3

Comment [FV127]: F 4 , F 5 a, F 7a

Comment [FV125]: TTD 1, TTD 3

Comment [FV126]: TTD 3

Comment [FV128]: F 1 a, F 3, F 8

Comment [FV129]: F 5 a

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

<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>Demonstrate an understanding of the risk of breaching patient confidentiality as a result of the use of new technologies such as telehealth, and internet or digital storage and transmission devices</p>	
<p>5.3. Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding</p>	<p>Assess patients' needs and preferences with respect to methods of information sharing</p>	

Comment [FV130]: TTD 1

Comment [FV131]: TTD 3

**COLLABORATOR MILESTONES: RESIDENCY**

Transition to discipline

Foundations of discipline

**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>Receive and appropriately respond to input from other health care professionals</p>	<p>Compare and contrast enablers of and barriers to collaboration in health care</p> <p>Respect established protocols of the operating room and team</p> <p>Differentiate between task and relationship issues among health care professionals</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 surgeon</p> <p>Discuss the roles and responsibilities of all participants in the operating room</p>	<p>Describe the roles and scopes of practice of other health care providers related to surgical practice</p> <p>Collaborate with other health care providers and all involved parties in booking the case including but not limited to ICU, Step down unit, or OR</p>

Comment [FV132]: TTD 2, F 2, F 5 b, F 6, F 8

Comment [FV133]: F 5 ab, F 6

Comment [FV135]: F 7 ab

Comment [FV134]: TTD 5

Comment [FV136]: F 3

		Work effectively with other healthcare professionals
1.3. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions	Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care  Describe the elements of a good consultation	Integrate the patient's perspective and context into the collaborative care plan

Comment [FV137]: F 1 b

Comment [FV140]: F 3, F 7ab

Comment [FV138]: TTD 1, TTD 4

Comment [FV139]: TTD 1

**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 nursing requests and concerns in a respectful and timely manner	Actively listen to and engage in interactions with collaborators
2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture	Communicate effectively with other physicians and health care professionals	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

Comment [FV142]: F 5 ab, F 6, F 7 b

Comment [FV141]: TTD 7

Comment [FV143]: TTD 2

Comment [FV144]: F 2, F 5 b, F 6

**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		Determine when care should be transferred to another physician or health professional  Initiate and coordinate transfer of care to other health care professionals  Identify patients requiring handover to other
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Comment [FV145]: F 2

Comment [FV146]: F 2

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

		physicians or health care professionals
3.2. Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care	<p>Describe specific information required for safe handover during transitions in <u>care</u></p> <p>Acknowledge that incomplete or inaccurate handover can result in suboptimal patient care, if not <u>harm</u></p> <p><u>Communicate</u> with the receiving physicians or health care professionals during transitions in care</p> <p>Perform safe and effective handover during transitions in <u>care</u></p>	<p>Communicate with the receiving physicians or health care professionals during transitions in care, clarifying issues after transfer as <u>needed</u></p> <p>Communicate with the patient's primary health care professional about the patient's <u>care</u></p> <p>Summarize the patient's issues in the transfer summary, including plans to deal with the ongoing <u>issues</u></p> <p>Arrange for the appropriate resources and allied health care assistance to be available for the surgical <u>patient</u></p>

Comment [FV147]: F 1 a

Comment [FV148]: TTD 4

Comment [FV152]: F 1 a, F 2

Comment [FV149]: TTD 4

Comment [FV153]: F 7 a

Comment [FV150]: TTD 3 TTD 4

Comment [FV154]: F 7 a

Comment [FV151]: TTD 2, TTD 4

Comment [FV155]: F 7 a

**LEADER MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**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	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>Describe the use of a pre-operative team checklist and how it improves patient safety</p>
1.2. Contribute to a culture that promotes patient safety	<p>Demonstrate an understanding of institutional patient safety guidelines</p> <p>Report patient safety incidents</p>	<p>Adhere to institutional safety <u>procedures</u></p> <p>Participate in the surgical checklist for all procedures</p>

Comment [FV156]: F 6



SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

		Provide informed discharge
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	Participate in continuous quality improvement activities including but not limited to morbidity and mortality rounds
1.4. Use health informatics to improve the quality of patient care and optimize patient safety	Utilize the data available in health information systems in their discipline to optimize patient care	Access supports and notification processes to enhance patient safety in their institution

Comment [FV158]: F 7 a

Comment [FV157]: TTD 3

**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
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 including but not limited to use of blood products, investigations, inpatient versus outpatient treatment and appropriate utilization of critical care unit resources

Comment [FV159]: F 1 a

**3. Demonstrate leadership in professional practice**

3.1. Demonstrate leadership skills to enhance healthcare	Analyze their own leadership styles, including strengths, weaknesses, and biases	
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

		<p>issues in their discipline</p> <p>Demonstrate an understanding of the introduction of new technologies and the need for:</p> <ul style="list-style-type: none"> <li>• Health technology assessment</li> <li>• Education</li> <li>• Credentialing</li> </ul>
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**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	<p>Build relationships with mentors</p> <p>Organize work using strategies that address strengths and identify areas to improve in personal effectiveness</p>
4.2. Manage a career and practice	<p>Review opportunities for practice preparation, including choices available for further training</p> <p>Maintain a portfolio and reflect upon professional development</p>	Examine personal interests and seek career mentorship and counselling
4.3. Implement processes to ensure personal practice improvement	<p>Describe how practice standardization can improve quality of health care</p> <p>Demonstrate an understanding of the appropriate use of information technology to enhance surgical practice</p> <ul style="list-style-type: none"> <li>• Presentation software</li> <li>• Personal digital assistant (PDAs)</li> <li>• Simulation and other technologies</li> <li>• Social media</li> </ul>	

Comment [FV160]: TTD 4

**HEALTH ADVOCATE MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment**

<p>1.1. Work with patients to address determinants of health that affect them, and their access to needed health services or resources</p>	<p>Analyze a given patient's needs for health services or resources related to the scope of surgical practice</p>	<p>Demonstrate an approach to working with patients to advocate for health services or resources</p>
<p>1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours</p>	<p>Identify resources or agencies that address the health needs of patients</p>	<p>Select patient education resources related to surgical practice</p> <p>Educate the patient and family about information and communication technologies to improve health</p> <p>Encourage patients to use appropriate safety equipment for work and leisure pursuits</p> <p>Identify opportunities to advocate for and facilitate appropriate screening</p>
<p>1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients</p>		<p>Work with the patient and family to identify opportunities for disease prevention, health promotion, and health protection</p> <p>Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients</p> <p>Perform screening for</p> <ul style="list-style-type: none"> <li>• Child abuse</li> <li>• Elder abuse</li> <li>• Domestic violence</li> </ul>

Comment [FV161]: F 7 b

Comment [FV163]: F 4 , F 7 a

Comment [FV162]: TTD 1

Comment [FV164]: F 3, F 7 a

Comment [FV165]: F 7a

		<p>Counsel regarding risk factors to health</p> <ul style="list-style-type: none"> <li>• Obesity</li> <li>• Smoking</li> <li>• Substance use and abuse</li> <li>• Other patient behaviours that place them at risk for injury or disease</li> </ul> <p>Counsel regarding opportunities for health and wellness</p> <p>Advocate for vulnerable and marginalized patients</p> <p>Advocate for appropriate screening and facilitate process</p>
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Comment [FV166]: F 3

**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>Demonstrate an appreciation of the needs of the communities or populations they serve and advocate for system level change</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>2.3. Contribute to a process to improve health in the community or population they serve</p>	<p>Demonstrate an appreciation of the importance of organ transplantation and identify potential donors</p>	<p>Partner with others to identify the health needs of a community or population they serve</p>

**SCHOLAR MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**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>Recognize the duality of being a learner as well as a practitioner</p>	<p>Create a learning plan in collaboration with a designated supervisor identifying learning needs related to surgical practice 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>Utilize learning portfolios, which may incorporate:</p> <ul style="list-style-type: none"> <li>• Surgical logs or portfolio</li> <li>• Encounter cards</li> <li>• Personal reflection pieces</li> </ul>
<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>Use surgical encounters to guide learning and skill refinement</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 junior learner</p> <p>Participate in and appreciate the utility of surgical morbidity and mortality rounds.</p>

Comment [FV167]: TTD 2

Comment [FV168]: F 6

Comment [FV169]: F 9

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

<p>2.1. Recognize the influence of role-modeling and</p>	<p>Define the hidden curriculum</p>	<p>Identify behaviours associated with positive and</p>
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SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

the impact of the formal, informal, and hidden curriculum on learners		negative role-modelling Describe the link between role-modelling and the hidden curriculum
2.2. Promote a safe learning environment		Explain how power differentials between learners and teachers can affect the learning environment Create a positive learning environment
2.3. Ensure patient safety is maintained when learners are involved		Identify unsafe clinical situations involving learners and manage them appropriately Demonstrate an understanding of the role of appropriate supervision
2.4. Plan and deliver a learning activity		Demonstrate basic skills in teaching others, including peers Plan learning activities appropriate to the level of the learner Present a review of a surgical topic
2.5. Provide feedback to enhance learning and performance		Provide written or verbal feedback to other learners, faculty and other members of the team
2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner		

Comment [FV170]: F 9

Comment [FV171]: F 9

Comment [FV172]: F 9

Comment [FV173]: F 5 a, F 6, F 9

Comment [FV174]: F 9

Comment [FV175]: F 9

Comment [FV176]: F 9

**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 surgical practice
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<p>3.2. Identify, select, and navigate pre-appraised resources</p>		<p>Contrast the various study designs used in medicine and the quality of various pre-appraised resources</p>
<p>3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature</p>		<p>Interpret study findings, including a critique of their relevance to surgical practice</p> <p>Determine the validity and risk of bias in a source of evidence</p>
<p>3.4. Integrate evidence into decision-making in their practice</p>		<p>Discuss the barriers to and facilitators of applying evidence into practice</p> <p>Describe how various sources of information, including studies, expert opinion, and practice audits, contribute to the evidence base of medical practice</p>

**4. Contribute to the creation and dissemination of knowledge and practices applicable to health**

<p>4.1. Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in healthcare</p>		
<p>4.2. Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations</p>		<p>Discuss and provide examples of the ethical principles applicable to research and scholarly inquiry relevant to surgical practice</p>
<p>4.3. Contribute to the work of a research program</p>		<p>Compare and contrast the roles and responsibilities of members of a research team and describe how they differ from clinical and other</p>

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

		practice roles and responsibilities
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 surgical practice
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



**PROFESSIONAL MILESTONES: RESIDENCY**

**Transition to discipline**

**Foundations of discipline**

**1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards**

<p>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>	<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>Demonstrate the ability to be objective in treating patients regardless of their socioeconomic status or other factors</p> <p>Exhibit appropriate professional behaviours</p>	<p><b>Comment [FV177]:</b> TTD 2, TTD 7</p> <p><b>Comment [FV178]:</b> TTD 3</p> <p><b>Comment [FV179]:</b> F 3</p> <p><b>Comment [FV180]:</b> F 6</p>
<p>1.2. Demonstrate a commitment to excellence in all aspects of practice</p>			
<p>1.3. Recognize ethical issues encountered in practice</p>		<p>Provide care to the critically ill patient commensurate to expressed advanced directives</p> <p>Recognize and respond appropriately in situations where consent is obtained under constraints of emergency circumstances</p>	<p><b>Comment [FV181]:</b> F 1 a</p> <p><b>Comment [FV182]:</b> F 4</p>
<p>1.4. Recognize and manage conflicts of interest</p>		<p>Demonstrate an awareness of the influence of industry on practice and training</p> <p>Identify potential conflicts of interest in surgical practice</p> <p>Manage conflicts of interest related to surgical care, including consent issues related to the duality of the learner as surgeon</p>	<p><b>Comment [FV183]:</b> F 4</p>
<p>1.5. Exhibit professional behaviours in the use of technology-enabled communication</p>	<p>Describe the risks of technology enabled communication in surgical practice including but</p>	<p>Demonstrate appropriate use of technology enabled communication</p>	<p><b>Comment [FV184]:</b> TTD 3 TTD 4</p>

not limited to social media

**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

Manage tensions between societal and physician's expectations

Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources

**Comment [FV185]:** F 3

2.2. Demonstrate a commitment to patient safety and quality improvement

Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures, and clinical practice guidelines

Monitor institutional and clinical environments and respond to issues that can harm patients or the delivery of health care

**Comment [FV186]:** F 6, F 7 a, F 8

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

3.1. Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice

Describe the roles of the Royal College, provincial regulatory body, hospital board and university from a resident's perspective

Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice:

- The Canada Health Act
- Pertinent provincial and federal health legislation including but not limited to Personal Health Information Protection Act (PHIPA)
- Provincial regulatory bodies
- Hospital governance
- Operating room governance
- Worker's compensation organizations
- Role of the Coroner's Office/Medical Examiners
- Public health as it relates to mandatory reporting of disease

**Comment [FV187]:** F 5 ab

SURGICAL FOUNDATIONS PATHWAY TO COMPETENCE (2018)

		Apply knowledge of institutional policies procedures and guidelines for residency code of conduct
3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care profession		Respond to peer-group lapses in professional conduct  Identify the process or policy regarding concerns about professional lapses
3.3. Participate in peer assessment and standard-setting		Contribute to the assessments for other learners on their clinical rotation

Comment [FV188]: F 9

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

4.1. Exhibit self-awareness and effectively manage influences on personal wellbeing and professional performance	<p>Demonstrate knowledge of the factors in residency that may affect personal well-being and professional performance</p> <p>Demonstrate knowledge of the resident safety policy of your program</p> <p>Demonstrate an understanding of techniques for stress reduction</p> <p>Demonstrate an understanding of occupational risks and their management</p> <ul style="list-style-type: none"> <li>• Ergonomics</li> <li>• Infection</li> <li>• Radiation</li> <li>• Fire</li> </ul>	<p>Develop a personal plan for managing stress and maintaining physical and mental well-being during residency</p> <p>Manage the mental, physical and environmental challenges that impact behaviour and/or performance in the clinical setting</p> <p>Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks</p> <p>Demonstrate an awareness of the risks associated with the high stress environments in which surgeons work</p> <p>Demonstrate techniques for stress reduction Promote a healthy lifestyle and demonstrate awareness of personal at risk behaviours:</p> <ul style="list-style-type: none"> <li>• Substance abuse</li> <li>• Fatigue management</li> <li>• Healthy personal relationships</li> <li>• Immunizations</li> </ul>
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Comment [FV190]: F 1 a, F 2, F 5 ab

Comment [FV191]: F 6, F 7 b

Comment [FV189]: TTD 5

<p>4.2. Manage personal and professional demands for a sustainable practice throughout the surgeon life cycle</p>		<p>Describe the influence of personal and environmental factors on the development of a career plan</p> <p>Describe strategies for improving work/life balance.</p>
<p>4.3. Promote a culture that recognizes, supports, and responds effectively to colleagues in need</p>		<p>Recognize the signs of physical and emotional stress in colleagues and know when and how to help.</p> <p>Use strategies to mitigate the impact of patient safety incidents</p>