

Entrustable Professional Activity Guide: Surgical Foundations

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How to cite this document

Surgical Foundations Specialty Committee. *EPA Guide: Surgical Foundations*. Ottawa: Royal College of Physicians and Surgeons of Canada; 2017.

Origins and Use

This document, commonly known as the Surgical Foundations EPA Guide, was developed by the Royal College's Surgical Foundations Committee to support the discipline's transition to Competence by Design (CBD). The format and structure of the document is designed specifically to support the development of the Royal College's technical infrastructure. Recognizing, however, that some faculty and residents will benefit from access to the document for teaching and planning purposes, the Royal College has opted to make the technical document available, as is. This material 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](#).

Structure and Format

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

When working with the electronic version of this document, you will find a navigation bar on the left-hand side of the PDF. This will support quick and easy transition between items.

Many of the items span multiple pages and share common design features. The following table describes the different design elements and should help users navigate through the items.

Feature	Description
Title	The title of each item includes the name of the discipline followed by the stage of training and item number. Items in each stage of training begin at number one. 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. 1AP – Item 1 is applicable to both the adult and pediatric stream).
EPA name	The Entrustable Professional Activity (EPA) name appears immediately after the title. This is a statement about the work of the discipline. It is observable and measurable.
Key features	The key features section describes the EPA and may include: <ul style="list-style-type: none">• the focus of the EPA (e.g. body system, type of injury, safe patient monitoring),

	<ul style="list-style-type: none"> • different aspects of the observation (E.g. patient assessment and procedural skills, observed in preoperative clinic) • pre-learning requirements (E.g. builds on skills previously attained), or • procedural requirements (E.g., includes surgical and non-surgical management) <p>This description helps both residents and supervisors better understand the nature and limitations of this professional activity; it may also emphasize requirements for consideration of entrustability.</p>
<p>Assessment Plan</p>	<p>The assessment plan describes the nature of the information that should be provided to the Competence Committee in order for that group to have enough information that they are able to make a decision regarding entrustment of this professional activity. This includes instruction on who is to provide the observation information (supervisor, delegate, other health professionals), the nature of the observation (e.g., direct or indirect), as well as the suggested ePortfolio observation form(s).</p> <p>This section also lists any additional information that should be collected about the case or observation, such as patient factors, diagnoses, treatments, and/or setting of care. This information helps build the observation form. The various factors included in this section are selected by the specialty committee in order to provide the Competence Committee with the breadth of information required to make a decision regarding entrustment of this EPA.</p>
<p>Relevant CanMEDS Milestones</p>	<p>Most EPAs are comprised of several CanMEDS milestones. Each milestone is preceded by a series of letters and numbers which link the milestone to the corresponding key and enabling competency within CanMEDS Interactive.</p> <p>For example, if the code is ME 1.6.</p> <p>-ME refers to the CanMEDS Role, <i>Medical Expert</i>. Other possibilities are COM= Communicator, COL=Collaborator, L = Leader, HA=Health Advocate, S=Scholar and P = Professional.</p> <p>-1.6 refers to the Key and enabling competencies within the aforementioned Role.</p>

Contact us if you have any questions or comments about this document at cbd@royalcollege.ca

Entrustable Professional Activities for Surgical Foundations

2018
VERSION 1.0

Surgical Foundations: Transition to Discipline EPA #1

Performing the preoperative preparation of patients for basic surgical procedures

Key Features:

- This EPA includes verifying pertinent clinical findings and completing relevant clinical documentation, including orders

Assessment plan:

Indirect observation by supervisor

Use Form 1.

Collect 1 observation of achievement

Relevant milestones

- 1 TD ME 1.6.1** Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making
- 2 TD ME 2.1.1** Identify the concerns and goals of the patient and family for the encounter
- 3 TD ME 2.2.1 Elicit a history and perform a physical exam that informs the diagnosis**
- 4 TD ME 2.4.1 Develop an initial management plan for common patient presentations in surgical practice**
- 5 TD ME 3.2.1** Describe the ethical principles and legal process of obtaining and documenting informed consent
- 6 TD ME 3.3.1** Recognize and discuss the importance of the triaging and timing of a procedure or therapy
- 7 TD COM 1.1.1** Communicate using a patient-centred approach that facilitates patient trust and autonomy and is characterized by empathy, respect, and compassion
- 8 TD COM 1.2.1** Mitigate physical barriers to communication to optimize patient comfort, privacy, engagement, and safety
- 9 TD COM 2.1.1 Conduct a patient-centred interview, gathering all relevant biomedical and psychosocial information for any clinical presentation**
- 10 TD COM 2.1.2** Integrate and synthesize information about the patient's beliefs, values, preferences, context and expectations with biomedical and psychosocial information
- 11 TD COM 2.1.3** 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
- 12 **TD COM 2.2.1** Conduct a focused and efficient patient interview, managing the flow of the encounter while being attentive to the patient's cues and responses
 - 13 **TD COM 2.3.1** 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
 - 14 **TD COM 5.1.1 Organize information in appropriate sections within an electronic or written medical record**
 - 15 **TD COM 5.1.2 Maintain accurate and up-to-date problem lists and medication lists**
 - 16 **TD COM 5.2.1** Demonstrate reflective listening, open-ended inquiry, empathy, and effective eye contact while using a written or electronic medical record
 - 17 **TD COL 1.3.1** Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care
 - 18 **TD COL 1.3.2 Describe the elements of a good consultation**
 - 19 **TD HA 1.2.1** Identify resources or agencies that address the health needs of patients

Surgical Foundations: Transition to Discipline EPA #2

Recognizing and initiating early management for critically ill surgical patients

Key Features:

- This EPA focuses on the initial approach to a critically ill patient; at this early stage of training, an important feature of this task is recognizing one's own limits and seeking assistance and/or handing over care to ensure safe patient management
- This EPA may be observed in simulation (e.g. OSCE)

Assessment plan:

Direct observation by supervisor and review of clinic note

Use Form 1. Form collects information on:

- Type of scenario: clinical; simulated

Collect 2 observations of achievement

Relevant milestones

- 1 TD ME 1.6.2 Recognize own limits and seek assistance when necessary**
- 2 TD ME 2.1.4 Perform initial resuscitation according to ACLS guidelines**
- 3 TD ME 2.2.1 Elicit a history and perform a physical exam that informs the diagnosis**
- 4 TD ME 2.2.2 Develop a differential diagnosis and adjust as new information is obtained**
- 5 TD ME 2.2.3 Select necessary initial investigations to assist in diagnosis and management**
- 6 TD ME 4.1.1 Identify the potential need for consultation**
- 7 TD COM 1.2.1 Mitigate physical barriers to communication to optimize patient comfort, privacy, engagement, and safety**
- 8 TD COM 2.3.1 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**
- 9 TD COL 1.1.1 Receive and appropriately respond to input from other health care professionals**
- 10 TD COL 2.2.1 Communicate effectively with other physicians and health care professionals**
- 11 TD COL 3.2.4 Perform safe and effective handover during transitions in care**
- 12 TD S 1.1.2 Recognize the duality of being a learner as well as a practitioner**
- 13 TD P 1.1.1 Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met**

Surgical Foundations: Transition to Discipline EPA #3

Documenting clinical encounters

Key Features:

- This EPA focuses on the synthesis and documentation of relevant medical and surgical information while ensuring professional behaviour in the use of electronic medical records and/or other technologies

Assessment plan:

Direct or indirect observation by supervisor with review of clinical documentation

Use Form 1. Form collects information on:

- Type of setting: inpatient; outpatient

Collect 2 observations of achievement

- At least 1 inpatient
- At least 1 outpatient

Relevant milestones

- 1 TD COM 2.3.1** 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
- 2 TD COM 5.1.1 Organize information in appropriate sections within an electronic or written medical record**
- 3 TD COM 5.1.2** Maintain accurate and up-to-date problem lists and medication lists
- 4 TD COM 5.1.3 Document an initial management plan for common patient presentations in surgical practice**
- 5 TD COM 5.2.2 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**
- 6 TD COL 3.2.3** Communicate with the receiving physicians or health care professionals during transitions in care
- 7 TD L 1.4.1 Utilize the data available in health information systems in their discipline to optimize patient care**
- 8 TD P 1.1.3 Complete assigned responsibilities**
- 9 TD P 1.5.1** Describe the risks of technology enabled communication in surgical practice including but not limited to social media

Surgical Foundations: Transition to Discipline EPA #4

Demonstrating handover technique

Key Features:

- This EPA focuses on the transitions of care that occur between residents and/or at times of patient transfer to another health care setting or location.
- Key aspects of this task include accurate and effective communication as well as professionalism in the use of medical information technology and/or social media

Assessment plan:

Direct observation by supervisor

Use Form 1.

Collect 2 observations of achievement

Relevant milestones

- 1 TD ME 2.1.2 Identify patients at risk for sudden deterioration in clinical status requiring closer follow-up**
- 2 TD COL 1.3.1 Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient's care**
- 3 TD COL 3.2.1 Describe specific information required for safe handover during transitions in care**
- 4 TD COL 3.2.2 Acknowledge that incomplete or inaccurate handover can result in suboptimal patient care, if not harm**
- 5 TD COL 3.2.3 Communicate with the receiving physicians or health care professionals during transitions in care**
- 6 TD COL 3.2.4 Perform safe and effective handover during transitions in care**
- 7 TD L 4.3.2 Demonstrate an understanding of the appropriate use of information technology to enhance surgical practice**
- 8 TD P 1.5.1 Describe the risks of technology enabled communication in surgical practice including but not limited to social media**

Surgical Foundations: Transition to Discipline EPA #5

Demonstrating ability to function in the operating room

Key Features:

- This EPA focuses on the safe and timely preparation for a surgical procedure including maintenance of sterility, universal precautions, handling of sharps and understanding occupational risks and hazards
- This EPA may be observed in simulation

Assessment plan:

Supervisor or delegate does assessment based on direct observation

Use Form 1. Form collects information on:

- Type of scenario: clinical; simulation

Collect 1 observation of achievement

Relevant milestones

- 1 TD ME 3.4.1 Demonstrate effective procedure preparation, including the use of a pre-procedure time-out or surgical safety checklist as appropriate**
- 2 TD ME 3.4.3 Perform pre-procedural tasks in a timely, skillful, and safe manner**
 - **Establish and maintain a sterile field**
 - **Maintain universal precautions**
 - **Ensure safe handling of sharps**
 - **Hand-cleanse, gown and glove**
- 3 TD COL 1.2.2 Discuss the roles and responsibilities of all participants in the operating room**
- 4 TD P 4.1.4 Demonstrate an understanding of occupational risks and their management**

Surgical Foundations: Transition to Discipline EPA #6

Repairing simple skin incisions/lacerations

Key Features:

- This EPA may be observed in simulation

Assessment plan:

Direct observation by supervisor

Use Form 1. Form collects information on:

- Type of scenario: clinical; simulation
- Wound size: < 2 cm, 2-5 cm, >5 cm

Collect 1 observation of achievement

- Wound must be at least 5 cm long

Relevant milestones

- 1 TD ME 2.4.2 Use appropriate prophylaxis**
- 2 TD ME 3.2.2 Obtain and document informed consent for simple wound closure**
- 3 TD ME 3.4.4 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**
- 4 TD ME 3.4.5 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**
- 5 TD COM 3.1.4 Plan and discuss appropriate postoperative care and issues with patients and families**

Surgical Foundations: Transition to Discipline EPA #7

Managing tubes, drains and central lines

Key Features:

- This EPA may be observed in any clinical or simulated scenario related to tubes and drains (nasogastric, Jackson-Pratt or similar, chest tubes, feeding tubes, foley catheter, central venous catheter) (e.g. blocked, accidentally removed etc.)

Assessment plan:

Indirect observation by supervisor

Use Form 1.

Collect 1 observation of achievement

Relevant milestones

- 1 TD ME 1.3.1 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**
- 2 TD ME 2.4.3** Develop a management plan for common presentations related to tubes, drains and lines
- 3 TD ME 3.3.2 Determine the priority with which various problems with in-situ tubes, drains and lines require intervention**
- 4 TD ME 3.4.6 Perform common procedures in a skillful, fluid and safe manner**
 - **unblock tubes and/or drains**
- 5 TD COM 3.1.2** Communicate the plan of care in a clear, compassionate, respectful, and accurate manner to the patient and family
- 6 TD COL 2.1.2 Respond to nursing requests and concerns in a respectful and timely manner**
- 7 TD P 1.1.1** Consistently prioritize the needs of patients and others to ensure a patient's legitimate needs are met

Surgical Foundations: Foundations EPA #1

Providing initial management for critically ill surgical patients

Key Features:

- The observation of this EPA is divided into two parts: patient assessment and performing procedures (needle thoracostomy; tube thoracostomy; central line insertion; surgical airway)
- This EPA may be observed on the ward, in the emergency room, in the intensive care unit or in a simulation facility

Assessment plan:

Part A: Patient Assessment

Direct or indirect observation by supervisor

Use Form 1. Form collects information on:

- Type of presentation: hemodynamic; airway/respiratory; decreased level of consciousness/acute change in mental status; sepsis
- Case complexity: low; medium; high

Collect 3 observations of achievement

- At least 2 different presentations

Part B: Procedure

Direct observation by supervisor

Use Form 2. Form collects information on:

- Type of procedure: needle thoracostomy; tube thoracostomy; central line insertion; surgical airway
- Setting: clinical; simulation

Collect 4 observations of achievement

- At least one needle thoracostomy
- At least one tube thoracostomy
- At least one surgical airway
- At least one central venous line insertion

Relevant milestones (Part A)

- 1 F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
 - 2 F ME 1.4.2** Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately
 - 3 F ME 1.5.1** On the basis of patient-centered priorities, seek assistance to prioritize multiple competing tasks that need to be addressed
 - 4 F ME 2.2.1** Develop a specific differential diagnosis relevant to the patient's presentation
-

- 5 **F ME 2.2.2** Select and/or interpret appropriate investigations and/or imaging with sufficient attention to clinical details
- 6 **F ME 2.2.3 Interpret common and simple investigational modalities**
- 7 **F ME 2.4.1 Develop and implement initial management plans for common problems in surgical practice**
- 8 **F ME 2.4.5** Manage unexpected peri-operative bleeding (both surgical and nonsurgical)
- 9 **F ME 3.3.1 Consider urgency, and potential for deterioration, in advocating for the timely execution of a procedure or therapy**
- 10 **F ME 4.1.1** Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved
- 11 **F COM 5.1.3 Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions**
- 12 **F COL 3.1.3 Identify patients requiring handover to other physicians or health care professionals**
- 13 **F COL 3.2.1 Communicate with the receiving physicians or health care professionals during transitions in care, clarifying issues after transfer as needed**
- 14 **F L 2.2.1** 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
- 15 **F P 1.3.1** Provide care to the critically ill patient commensurate to expressed advanced directives
- 16 **F P 4.1.2** Manage the mental, physical and environmental challenges that impact behaviour and/or performance in the clinical setting

Relevant milestones (Part B)

- 1 **F ME 3.1.4 Gather and/or assess required information to determine the procedure required**
- 2 **TD ME 3.4.2 Set up and position the patient for a procedure**
- 3 **F ME 3.4.4 Perform common procedures in a skillful, fluid and safe manner**
- 4 **F ME 3.4.7 Establish and implement a plan for post-procedure care**
- 5 **F COL 1.2.1 Work effectively with other health care professionals**

Surgical Foundations: Foundations EPA #2

Providing initial management for trauma patients

Key Features:

- The observation of this EPA is divided into two parts: achievement of ATLS certification and participation as a member of the trauma team caring for a patient with multisystem trauma
- This EPA may include vascular control, application of a splint for bony injury or soft tissue injury, and securing of arterial and/or venous vascular access in critical and non-critical situations

Assessment plan:

Part A: ATLS Certification

Submission of the certificate of course completion upon successful completion of ATLS course, to the Competence Committee

Part B: Patient assessment

Direct observation by trauma team leader

Use Form 1. Form collects information on:

- Role of resident: primary; secondary survey

Collect 2 observations of achievement

- At least one each primary and secondary survey

Relevant milestones (Part B)

- 1 F ME 1.4.1 Perform focused clinical assessments with recommendations that are well-documented**
 - 2 F ME 1.4.2 Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately**
 - 3 F ME 2.1.1 Iteratively establish priorities as the patient's situation evolves**
 - 4 F ME 2.2.1 Develop a specific differential diagnosis relevant to the patient's presentation**
 - 5 F ME 3.3.1 Consider urgency, and potential for deterioration, in advocating for the timely execution of a procedure or therapy**
 - 6 F ME 3.4.1 Perform pre-procedural tasks in a timely, skillful, and safe manner**
 - 7 F ME 3.4.3 Perform surgical techniques in a timely, skillful, and safe manner**
 - Vascular control in elective and critical situations
 - Application of a splint for bony injury or soft tissue injury
 - Securing arterial and venous vascular access in critical and non-critical situations
 - 8 F ME 4.1.6 Establish plans for ongoing care, taking into account the patient's clinical state as well as available resources**
-

- 9 F ME 4.1.7 Implement management to stabilize the patient prior to additional testing or transfer**
- 10 F COM 1.2.1** Optimize the physical environment for patient comfort, privacy, engagement, and safety
- 11 TD COL 1.1.1 Receive and appropriately respond to input from other health care professionals**
- 12 F COL 2.2.2** Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts
- 13 F COL 3.1.1** Determine when care should be transferred to another physician or health professional
- 14 F COL 3.2.1** Communicate with the receiving physicians or health care professionals during transitions in care, clarifying issues after transfer as needed
- 15 F P 4.1.2** Manage the mental, physical and environmental challenges that impact behaviour and/or performance in the clinical setting

Surgical Foundations: Foundations EPA #3

Assessing and performing risk optimization for preoperative patients in preparation for surgery

Key Features:

- This EPA includes selecting/reviewing relevant investigations, optimizing any pre-operative risk factors and preparing the patient for surgery

Assessment plan:

Direct or indirect observation by supervisor

Use Form 1. Form collects information on:

- Surgical priority: elective; emergent
- Patient risk category: low; moderate; high; critically ill

Collect 4 observations of achievement

- At least one elective, one emergent
- At least one high risk
- At least one critically ill
- At least 2 assessors

Relevant milestones

- 1 **F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
 - 2 **F ME 1.4.1 Perform focused clinical assessments with recommendations that are well-documented**
 - 3 **F ME 2.2.1** Develop a specific differential diagnosis relevant to the patient's presentation
 - 4 **F ME 2.2.2 Select and/or interpret appropriate investigations and/or imaging with sufficient attention to clinical details**
 - 5 **F ME 2.4.4 Develop and implement plans for pre-operative optimization of patients**
 - 6 **F ME 2.4.6 Use appropriate prophylaxis**
 - 7 **F ME 3.1.1** Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy
 - 8 **F ME 3.2.1** Obtain informed consent for commonly performed procedures and therapies, under supervision
 - 9 **F ME 3.2.2** Assess patients' decision-making capacity
 - 10 **F ME 3.3.1 Consider urgency and potential for deterioration, in advocating for the timely execution of a procedure or therapy**
 - 11 **F ME 4.1.1** Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved
 - 12 **F ME 5.2.1 Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety**
 - 13 **F COM 1.6.1** Encourage discussion, questions, and interaction to validate understanding during the encounter
 - 14 **F COM 3.1.1** 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
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- 15 **F COM 5.1.3** Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions
- 16 **F COL 1.2.2 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**
- 17 **F COL 1.3.1** Integrate the patient's perspective and context into the collaborative care plan
- 18 **F HA 1.3.2 Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients**
 - Counsel regarding risk factors to health
 - smoking cessation
 - Counsel regarding opportunities for health and wellness
 - Advocate for vulnerable and marginalized patients
 - Advocate for appropriate screening and facilitate process
- 19 **F P 1.1.2** Demonstrate the ability to be objective in treating patients regardless of their socioeconomic status or other factors
- 20 **F P 2.1.2** Describe the tension between the physician's role as advocate for individual patients and the need to manage scarce resources

Surgical Foundations: Foundations EPA #4

Providing patient education and informed consent in preparation for surgical care

Key Features:

- This EPA focuses on the communication that occurs with patients and families to inform and discuss plans for surgical care

Assessment plan:

Direct observation by supervisor

Use Form 1. Form collects information on:

- Type of procedure: emergency; elective
- Setting: clinical; simulation

Collect 3 observations of achievement

- At least 2 different assessors
- At least one emergency procedure
- At least one elective procedure
- At least two in clinical setting

Relevant milestones

- 1 **F ME 2.3.1** Work with patients and their families to understand relevant options for care
- 2 **F ME 2.4.2** 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
- 3 **F ME 2.4.3** Discuss clinical uncertainty with the patient and family
- 4 **F ME 3.2.1** Obtain informed consent for commonly performed procedures and therapies, under supervision
- 5 **F ME 3.2.2** Assess patients' decision-making capacity
- 6 **F ME 4.1.3** Apply standardized care paths, including patient education components
- 7 **F COM 1.2.1** Optimize the physical environment for patient comfort, privacy, engagement, and safety
- 8 **F COM 1.5.2** Manage challenging conversations
- 9 **F COM 1.6.1** Encourage discussion, questions, and interaction to validate understanding during the encounter
- 10 **F COM 3.1.2** Plan and discuss appropriate post-operative, immediate and/or long-term care and issues with patients and families as appropriate
- 11 **F COM 4.1.2** Communicate with cultural awareness and sensitivity
- 12 **F COM 5.1.1** Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care
- 13 **F HA 1.2.1** Select patient education resources related to surgical practice
- 14 **F P 1.3.2** Recognize and respond appropriately in situations where consent is obtained under constraints of emergency circumstances
- 15 **F P 1.4.3** Manage conflicts of interest related to surgical care, including consent issues related to the duality of the learner as surgeon

Surgical Foundations: Foundations EPA #5

Demonstrating the fundamental aspects of surgical procedures

Key Features:

- The observations of this EPA are separated into two parts: observations of the resident's performance in the foundational aspects of surgical procedures and observations of the resident's participation as a member of the surgical team.
- This EPA may be observed in any clinical setting (e.g. ER, OR, minor setting)

Assessment plan:

Part A: Foundational aspects of procedures

Direct observation by supervisor

Use Form 1.

Collect 4 observations of achievement

- At least 2 by faculty
- At least 2 different types of procedures
- At least 2 different assessors

Part B: Participating in a team

Multiple observers provide feedback individually, which is then collated to one report for Competence Committee review

Use Form 3. Form collects information on:

- Role: surgeon; nurse; anesthetist; other

Collect feedback from at least 6 observers

- At least one each of surgeon, nurse, and anesthetist

Relevant milestones (Part A)

- 1 F ME 2.4.6 Use appropriate prophylaxis**
- 2 F ME 3.4.1 Perform pre-procedural tasks in a timely, skillful, and safe manner**
 - **Apply aseptic technique for all procedures**
 - **Maintain universal precautions**
 - **Position the patient appropriately**
 - **Mark appropriate side/site**
 - **Prepare the operative site**
 - **Cleanse the operative site**
 - **Hand-cleanse, gown and glove**
 - **Demonstrate appropriate draping of the patient**
 - **Deliver pre-procedural local anesthesia if appropriate**

- 3 **F ME 3.4.2 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**
- 4 **F ME 3.4.5 Perform post-procedural tasks in a timely, skillful, and safe manner**
 - **Prepare and handle specimens for intra-operative consultation with a pathologist**
 - **Perform appropriate wound surveillance and dressing care**
- 5 **F ME 5.1.3 Demonstrate an understanding of the steps to take when there has been a break in universal precautions or sterility contamination**
- 6 **F ME 5.1.4 Prevent complications that stem from operative positioning**
- 7 **F ME 5.2.1 Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety**
- 8 **F COM 5.1.1 Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care**
- 9 **F COM 5.1.4 Document operative procedures to adequately convey clinical findings, reasoning and the rationale for decisions**
- 10 **F COL 1.1.2 Respect established protocols of the operating room and team**
- 11 **F COL 2.1.1 Actively listen to and engage in interactions with collaborators**
- 12 **F S 2.3.2 Demonstrate an understanding of the role of appropriate supervision**
- 13 **F P 3.1.1 Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice**
- 14 **F P 4.1.2 Manage the mental, physical and environmental challenges that impact behaviour and/or performance in the clinical setting**

Relevant milestones (Part B)

- 1 **F COL 1.1.2 Respect established protocols of the operating room and team**
- 2 **TD COL 1.1.1 Receive and appropriately respond to input from other health care professionals**
- 3 **F COL 2.1.1 Actively listen to and engage in interactions with collaborators**
- 4 **F COL 2.2.2 Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts**
- 5 **F P 3.1.1 Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice**
- 6 **F P 4.1.2 Manage the mental, physical and environmental challenges that impact behaviour and/or performance in the clinical setting**

Surgical Foundations: Foundations EPA #6

Participating in surgical procedures

Key Features:

- This EPA may be observed in a range of procedures, including those specific to the primary entry surgical specialty as well as others

Assessment plan:

Direct observation by supervisor in OR (minor surgery or emergency)

Use Form 2. Form collects information on:

- Role of resident: primary assistant to the operator; secondary assistant to the operator
- Role of observer: faculty; fellow; senior resident; other
- Type of procedure (or parts thereof):

Collect 4 observations of achievement

- At least 2 by faculty
- At least 2 different types of procedures
- At least 2 different assessors

Relevant milestones

- 1 F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
- 2 F ME 1.3.2** **Apply knowledge of anatomy relevant to the surgical site**
- 3 F ME 1.4.2** Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately
- 4 F ME 3.4.2** **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**
- 5 F ME 3.4.3** **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**
 - **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**
- 6 F COL 1.1.2 Respect established protocols of the operating room and team
- 7 **TD COL 1.1.1 Receive and appropriately respond to input from other health care professionals**
- 8 F COL 2.1.1 Actively listen to and engage in interactions with collaborators
- 9 F COL 2.2.2 Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts
- 10 F L 1.2.1 Adhere to institutional safety procedures
- 11 F S 1.2.2 **Use surgical encounters to guide learning and skill refinement**
- 12 F S 2.3.2 **Demonstrate an understanding of the role of appropriate supervision**
- 13 F P 1.1.3 **Exhibit appropriate professional behaviours**
- 14 F P 2.2.1 Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures, and clinical practice guidelines
- 15 F P 4.1.3 Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks

Surgical Foundations: Foundations EPA #7

Managing uncomplicated postoperative surgical patients

Key Features:

- The observation of this EPA is divided into two parts: postoperative patient management and participation as a member of the discharge planning team
- The postoperative patient management includes all aspects of writing postoperative orders, providing ongoing clinical care; documenting the postoperative course and planning for discharge

Assessment plan:

Part A: Postoperative Management

Direct or indirect observation by supervisor

Use Form 1. Form collects information on:

- Stage of management: post-op orders; clinical management; documentation of post-op course; discharge planning
- Hospital stay: day surgery; same day admit; inpatients
- Surgical complexity: major procedure; minor procedure
- Patient complexity: low; medium; high

Collect 8 observations of achievement

- At least 2 from each stage of management
- A range of hospital stays
- A range of patient complexity
- At least 4 different assessors

Part B: Collaborative Care

Multiple observers from discharge planning team provide feedback individually, which is then collated to one report for Competence Committee review

Use Form 3. Form collects information on:

- Role: resident; faculty; nurse; other health professional

Collect feedback from at least 6 observers

- At least 2 different roles

Relevant milestones (Part A)

- 1 F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
 - 2 F ME 1.4.1** Perform focused clinical assessments with recommendations that are well-documented
 - 3 F ME 3.4.5** Perform post-procedural tasks in a timely, skillful, and safe manner
 - Perform appropriate wound closure and dressing care
 - 4 F ME 4.1.1** Coordinate investigation, treatment, and follow-up plans when
-

- multiple physicians and healthcare professionals are involved**
- 5 **F ME 4.1.2** Ensure follow-up on results of investigation and response to treatment
- 6 **F ME 4.1.4** **Implement a post-operative care plan for patients with an uneventful postoperative course**
- 7 **F ME 5.2.1** Use cognitive aids such as procedural checklists, structured communication tools, or care paths, to enhance patient safety
- 8 **F COM 3.1.1** **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**
- 9 **F COM 3.1.2** **Plan and discuss appropriate post-operative, immediate and/or long-term care and issues with patients and families as appropriate**
- 10 **F COM 4.3.1** Answer questions from the patient and family about next steps
- 11 **F COM 5.1.1** **Document information about patients and their medical conditions in a manner that enhances intra- and interprofessional care**
- 12 **F COL 1.2.1** Describe the roles and scopes of practice of other health care providers related to surgical practice
- 13 **F COL 1.3.1** Integrate the patient's perspective and context into the collaborative care plan
- 14 **F COL 3.2.2** **Communicate with the patient's primary health care professional about the patient's care**
- 15 **F COL 3.2.3** **Summarize the patient's issues in the transfer summary, including plans to deal with the ongoing issues**
- 16 **F COL 3.2.4** **Arrange for the appropriate resources and allied health care assistance to be available for the surgical patient**
- 17 **F L 1.4.1** Access supports and notification processes to enhance patient safety in their institution
- 18 **F HA 1.2.1** **Select patient education resources related to surgical practice**
- 19 **F HA 1.3.2** Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients
- Perform screening for
 - Child abuse
 - Elder abuse
 - Domestic violence
- 20 **F P 2.2.1** Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures, and clinical practice guidelines

Relevant milestones (Part B)

- 1 **F COL 1.2.1** **Describe the roles and scopes of practice of other health care providers related to surgical practice**
- 2 **F COL 1.3.1** **Integrate the patient's perspective and context into the collaborative care plan**
- 3 **F COL 2.1.1** **Actively listen to and engage in interactions with collaborators**
- 4 **F COL 3.2.4** **Arrange for the appropriate resources and allied health care assistance to be available for the surgical patient**
- 5 **F HA 1.1.1** **Demonstrate an approach to working with patients to advocate for health services or resources**
- 6 **F P 4.1.3** **Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks**

Surgical Foundations: Foundations EPA #8

Managing postoperative patients with complications

Key Features:

- This EPA may include any of the following complications: post-op fever; low urine output; hypotension; chest pain; shortness of breath; bleeding; delirium; ileus

Assessment plan:

Indirect observation by supervisor with review of clinic note

Use Form 1. Form collects information on:

- Type of complication: post-op fever; low urine output; hypotension; chest pain; shortness of breath; bleeding; delirium; ileus
- Hemodynamic status: stable; unstable

Collect 8 observations of achievement

- At least 4 different complications
- At least 3 assessors

Relevant milestones

- 1 **F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
- 2 **F ME 1.4.1 Perform focused clinical assessments with recommendations that are well-documented**
- 3 **F ME 1.4.2 Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately**
- 4 **F ME 2.2.1 Develop a specific differential diagnosis relevant to the patient's presentation**
- 5 **F ME 2.2.2 Select and/or interpret appropriate investigations and/or imaging with sufficient attention to clinical details**
- 6 **F ME 3.3.1 Consider urgency and potential for deterioration, in advocating for the timely execution of a procedure or therapy**
- 7 **F ME 4.1.1** Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved
- 8 **F ME 4.1.2** Ensure follow-up on results of investigation and response to treatment
- 9 **F ME 4.1.5 Implement a post-operative care plan for patients with a complicated post-operative course**
- 10 **F ME 4.1.8** Identify the needs of the patient and appropriately consult other health professionals as indicated
- 11 **F ME 5.1.5** Recognize the occurrence of a patient safety incident
- 12 **F COM 3.1.1** 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
- 13 **F COM 3.1.2** Plan and discuss appropriate postoperative, immediate and/or long-term care and issues with patients and families as appropriate
- 14 **F COM 3.2.1** Describe the steps in providing disclosure after a patient safety incident

- 15 F COM 5.1.3 Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions**
- 16 TD COL 1.1.1** Receive and appropriately respond to input from other health care professionals
- 17 F P 2.2.1 Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures, and clinical practice guidelines**

Surgical Foundations: Foundations EPA #9

Supervising junior learners in the clinical setting

Key Features:

- This EPA focuses on the clinical supervision of junior learners, and includes ensuring safe patient care, as well as teaching and providing feedback

Assessment plan:

Direct observation by supervisor and junior learners

Use Form 1. Form collects information on:

- Assessor's role: junior learner, senior resident, faculty

Collect 6 observations of achievement

- At least 3 different junior learners
- At least 3 different senior residents or faculty

Relevant milestones

- 1 F ME 1.3.1** Apply clinical and biomedical sciences to manage core patient presentations in surgical practice
- 2 F S 1.3.1 Identify the learning needs of a junior learner**
- 3 F S 2.1.1** Identify behaviours associated with positive and negative role-modelling
- 4 F S 2.2.2** Create a positive learning environment
- 5 F S 2.3.1** Identify unsafe clinical situations involving learners and manage them appropriately
- 6 F S 2.3.2 Demonstrate an understanding of the role of appropriate supervision**
- 7 F S 2.4.1** Demonstrate basic skills in teaching others, including peers
- 8 F S 2.4.2** Plan learning activities appropriate to the level of the learner
- 9 F S 2.5.1** Provide written or verbal feedback to other learners, faculty and other members of the team
- 10 F P 3.3.1** Contribute to the assessments for other learners on their clinical rotation