

Entrustable Professional Activities for General Surgery

2020
VERSION 1.0

General Surgery: Foundations EPA #1

Assessing and providing initial management plans for patients presenting with a simple General Surgery problem

Key Features:

- This EPA includes conducting an appropriate history and physical examination, ordering and interpreting investigations, generating provisional and differential diagnoses, and developing and communicating a management plan for patients with simple surgical problems.

Assessment Plan:

Direct and indirect observation by surgeon, surgical fellow, or Core or TTP resident

Use Form 1. Form collects information on:

- Setting: inpatient; outpatient; emergency
- Observation: direct; indirect

Collect 5 observations of achievement

- At least 1 direct observation
- At least 2 different observers
- At least 3 observations by faculty

Relevant Milestones:

- 1 ME 1.5 Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance**
- 2 ME 2.2 Elicit an accurate, concise, and relevant history**
- 3 ME 2.2 Perform a physical exam that informs the diagnosis**
- 4 ME 2.2 Develop a differential diagnosis relevant to the patient's presentation**
- 5 ME 2.2 Select and/or interpret appropriate investigations, including imaging**
- 6 ME 2.4 Develop and implement a plan for initial management**

- 7** **COM 3.1 Provide information to the patient and/or family clearly and compassionately**
- 8** **COM 5.1 Document the clinical encounter to adequately convey clinical reasoning and rationale for decisions and/or recommendations**
- 9** **COL 1.1** Receive and appropriately respond to input from other health care professionals
- 10** **P 1.1** Maintain patient confidentiality

General Surgery: Foundations EPA #2

Recognizing and initiating management for patients with a surgical abdomen/acute abdomen

Key Features:

- This EPA focuses on recognizing, assessing, and managing patients with surgical emergencies arising from intra-abdominal pathology; this includes emergencies in their initial presentation as well as in post-operative complications.
- This includes recognition and initial management of critically ill patients (i.e. those with evidence of end organ dysfunction), and communication with anesthesia and/or critical care, as necessary.

Assessment Plan:

Direct observation and/or case review by general surgeon, critical care physician, surgical subspecialty trainee, or Core or TTP resident

Use Form 1. Form collects information on:

- Setting: inpatient; emergency department; ICU
- Presentation (select all that apply): shock; peritonitis; perforated viscus; end organ dysfunction
- Observation: direct; case review

Collect 3 observations of achievement

- At least 2 observations by faculty

Relevant Milestones:

- 1 ME 2.1 Determine the acuity of the issue and establish priorities for patient care**
- 2 ME 2.1 Initiate resuscitation**
- 3 ME 2.2 Select and/or interpret appropriate investigations, including imaging**
- 4 ME 2.2 Develop a differential diagnosis relevant to the patient's presentation**
- 5 P 1.1 Work within personal limits, asking for help as needed**
- 6 COL 1.2 Consult as needed with other physicians**
- 7 ME 4.1 Recognize potential postoperative complications**
- 8 L 2.1 Utilize resources appropriately**

General Surgery: Foundations EPA #3

Performing fundamental skills in General Surgery

Key Features:

- This EPA builds on Surgical Foundations EPA "Participating in surgical procedures", adding a focus on surgical tasks specific to General Surgery for the patient with an uncomplicated surgical abdomen.
- This EPA may be observed in the simulation lab.

Assessment Plan:

Direct observation by a surgeon, surgical fellow or TTP resident

Use Form 2. Form collects information on:

- Setting: OR; simulation lab
- Procedure: laparotomy; laparoscopy
- Surgical task (select all that apply): laparotomy (opening); laparotomy (closing); gaining laparoscopic access; safe use of pneumoperitoneum; trocar positioning/insertion; use of the camera; manipulation of instruments; port closure; safe use of energy devices

Collect 6 observations of achievement

- At least 2 laparotomy, including 1 opening and 1 closing
- At least 2 laparoscopy
- No more than 1 simulated scenario for each surgical task
- At least 3 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**

- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Foundations EPA #4

Performing the pre-procedural assessment and risk optimization for patients undergoing endoscopy

Key Features:

- This EPA focuses on obtaining informed consent and preparing patients for endoscopic procedures, including upper (i.e. EGD) and lower endoscopies (i.e. colonoscopy).
- This includes assessing patient acuity and determining the urgency of the procedure, optimizing the patient for the procedure, and determining and arranging the necessary logistics, services and/or resources in order to safely perform the procedure.
- The observation of this EPA is divided into two parts: obtaining informed consent, and preparing the patient for the endoscopic procedure.

Assessment Plan:

Part A: Consent

Direct observation by faculty, subspecialty trainee (General Surgery, General Surgery subspecialty or GI), or Core or TTP General Surgery resident

Use Form 1.

Collect 2 observations of achievement

- At least 1 observation by faculty

Part B: Patient preparation

Direct or indirect observation by faculty, subspecialty trainee (General Surgery, General Surgery subspecialty or GI), or Core or TTP General Surgery resident

Use Form 1. Form collects information on:

- Settings: clinic; endoscopy suite; inpatient; emergency department; ICU
- Urgency: elective; non-elective
- Endoscopy: upper; lower

Collect 4 observations of achievement

- At least 1 upper endoscopy
- At least 1 lower endoscopy
- At least 1 non-elective
- At least 2 different observers
- At least 2 observations by faculty

Relevant Milestones:

Part A: Consent

- 1 **ME 3.2 Explain the risks and benefits of, and alternatives for a proposed procedure**
- 2 **COM 3.1 Provide information to the patient and/or family clearly and compassionately**
- 3 **COM 4.3 Use communication skills and strategies that help the patient make an informed decision**
- 4 **COM 1.5** Manage interactions with patients and families when there is discordance regarding decisions to pursue investigations
- 5 **ME 3.2** Use shared decision-making in the consent process
- 6 **COM 5.1 Document the consent discussion in an accurate and complete manner**

Part B: Patient preparation

- 1 **ME 2.2** Assess patient suitability to undergo an endoscopic procedure
- 2 **ME 2.2 Assess age, co-morbidities, and clinical status to determine peri-procedural risk and opportunities for risk mitigation**
- 3 **ME 2.4 Order the preparation for the endoscopic procedure to optimize procedural outcomes**
- 4 **ME 3.4 Select the appropriate location and sedation for the patient's procedure**
- 5 **ME 3.4** Develop a plan for the appropriate disposition of the patient post procedure, as applicable
- 6 **COM 5.1 Document the clinical encounter to adequately convey clinical reasoning and rationale for decisions and/or recommendations**

General Surgery: Foundations Special Assessment # 1

Developing a proposal for a scholarly project

Key Features:

- This special assessment applies the basic principles of scholarly activity.
- The scholarly activity may include a QI project, research project, or literature review.
- Achievement is based on review of the resident's submission of a completed proposal for a scholarly project or a REB application, or equivalent.
- The submission should demonstrate synthesis of a proposal and a clear plan for a scholarly project.

Assessment Plan:

Review of resident's submission of a completed proposal, REB application, or equivalent by research supervisor, program director, or delegate (i.e. research director)

Use Form 4.

Collect 1 observation of achievement

Relevant Milestones:

- 1 S 4.4** Generate focused questions for scholarly investigation
- 2 S 3.3** Critically evaluate the integrity, reliability, and applicability of health-related research and literature
- 3 S 4.5** Summarize the findings of a literature review
- 4 S 4.4** Select appropriate methods of addressing a given scholarly question
- 5 S 4.2** Identify ethical principles in research
- 6 S 4.3** Secure a supervisor's commitment for a scholarly project

General Surgery: Core EPA #1

Providing surgical consultation

Key Features:

- This EPA focuses on providing a General Surgery consult for any patient and presentation, including establishing the goals of care and deciding whether or not to operate.
- This EPA includes obtaining an appropriate history and physical exam, and developing and communicating a comprehensive management plan, including for patients with complex clinical problems.
- Patients with complex clinical problems are defined as those with multiple conditions that co-exist and/or interact, a single condition with multi-systemic manifestation, an atypical presentation of a common condition, and/or management challenges due to social determinants of health and/or cultural complexities.
- This EPA may include the decision to move to a palliative approach to care and the provision of end-of-life care.

Assessment Plan:

Direct observation and/or case review by general surgeon, surgical subspecialist, subspecialty trainee, or TTP trainee

Use Form 1. Form collects information on:

- Setting: emergency; inpatient; outpatient; OR; ICU; simulation
- Type of surgery: elective; emergent
- Complex case: yes; no
- Presentation (write in):
- Simulation: yes; no

Collect 10 observations of achievement

- At least 2 different settings
- No more than 1 in simulation setting
- At least 5 complex cases
- At least 1 thyroid or parathyroid presentation
- At least 3 different observers
- At least 5 observations by faculty

Relevant Milestones:

- 1 ME 1.7** Seek assistance when appropriate
- 2 ME 1.5 Perform a clinical assessment that addresses all relevant issues**
- 3 ME 2.2** Focus the clinical encounter, performing it in a time-effective manner without excluding key elements in complex patients

- 4 **ME 2.2 Select and interpret appropriate investigations based on a differential diagnosis**
- 5 **ME 2.2 Synthesize patient information to assess indications and risk of surgery**
- 6 **ME 2.4** Develop and implement management plans that consider all of the patient's health problems and context
- 7 **ME 2.4** Develop a plan for management which may include observation, surgical intervention and/or non-operative intervention
- 8 **ME 3.2 Obtain and document informed consent, explaining the risks and benefits of and the rationale for a proposed procedure or therapy**
- 9 **COM 1.5 Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are affecting an interaction and respond appropriately**
- 10 **COM 3.1** Convey information about diagnosis, prognosis and/or current health status clearly and compassionately
- 11 **COM 5.1 Document the clinical encounter to adequately convey clinical reasoning and rationale for decisions and/or recommendations**
- 12 **COL 1.3** Communicate effectively with other physicians and health care professionals
- 13 **HA 1.2** Apply the principles of behaviour change during conversations with patients about adopting healthy behaviours
- 14 **P 1.1** Maintain patient confidentiality

General Surgery: Core EPA #2

Providing initial assessment and management of patients with multiple traumatic injuries

Key Features:

- This EPA focuses on applying the principles of ATLS in resuscitation and initial management of patients with multiple injuries, including appropriate collaboration with other health care professionals.
- This EPA includes selecting and interpreting appropriate diagnostic investigations.
- This EPA includes identifying the need for operative and non-operative management, as well as recognizing the need for patient transfer and/or referral.
- This EPA builds on the skills of Surgical Foundations to include surgical leadership and shared decision-making in managing trauma; this may include leadership roles such as trauma team leader (TTL), trauma captain, or junior TTL, under the supervision of a staff TTL.
- This EPA may be observed in the simulation setting.

Assessment Plan:

Direct observation and/or case review by a general surgeon, emergency physician, TTL, or trauma fellow

Use Form 1. Form collects information on:

- Setting: clinical; simulation
- Type of trauma: blunt; penetrating
- Patient condition: stable; unstable
- Observation: direct; case review

Collect 5 observations of achievement

- At least 1 penetrating trauma, may be in the simulation setting
- At least 1 unstable patient
- At least 3 direct observations
- At least 3 observations by faculty

Relevant Milestones:

- 1 ME 2.1 Prioritize the clinical assessment of a patient with traumatic injury, applying ATLS guidelines**
- 2 ME 2.2 Select and/or interpret appropriate investigations, including imaging**
- 3 ME 2.4 Develop a plan for management which may include observation, surgical intervention and/or non-operative intervention**
- 4 ME 3.3 Triage a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources**

- 5 **COM 3.1 Convey information about diagnosis, prognosis and/or current health status clearly and compassionately**
- 6 **COM 5.1** Document the clinical encounter to adequately convey clinical reasoning and rationale for decisions and/or recommendations
- 7 **COL 1.3 Communicate effectively with other physicians and health care professionals**
- 8 **COL 3.2 Provide safe transfer of care, both verbal and written, during patient transitions to a different health care professional, setting, or stage of care**
- 9 **L 4.2 Apply leadership skills and situational awareness in trauma resuscitation**

General Surgery: Core EPA #3

Leading the team providing care for an inpatient surgical service

Key Features:

- This EPA focuses on the efficient management of an inpatient service in the role of the physician most responsible for patient care.
- This includes providing peri-operative and non-operative management for routine and complex patients, including nutritional assessment and management, wound assessment and management, and optimization of care for co-morbidities.
- It also includes managing the service, including making discharge plans, working effectively with other health care professionals and supervising junior learners as well as administrative duties relevant to the organization of a team of physicians (triaging and delegating tasks, making call schedules, attending service rounds, managing conflict between other learners).
- The observation of this EPA is divided into two parts: overall patient care and working effectively with the interprofessional team.
- Both aspects are based on at least one week of observation.

Assessment Plan:

Part A: Patient care

Direct and indirect observation by supervisor

Use Form 1. Form collects information on:

- Setting: community; tertiary; other setting
- Service (write in):
- Average # of inpatients per day: 1-9; 10+
- Patient issues (select all that apply): complex wound/fistulae; nutritional management; other complex issue; not applicable

Collect 5 observations of achievement

- At least 1 in a community setting
- At least 1 in a General Surgery acute care service
- At least 3 in a service with more than 10 patients on average
- At least 3 different observers

Part B: Interprofessional care/supervision

Direct and indirect observation by supervisor, with input from the interprofessional team

Use Form 1. Form collects information on:

- Setting: community; tertiary; other setting
- Service (write in):
- Average # of inpatients per day: 1-9; 10+
- Includes feedback from (select all that apply): nurse; physician assistant; social worker; other health care professional; other resident; medical student(s)

Collect 3 observations of achievement

Relevant Milestones:

Part A: Patient Care

- 1 **ME 1.1 Demonstrate responsibility and accountability for decisions regarding patient care**
- 2 **ME 1.4** Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentations in General Surgery
- 3 **ME 3.1 Determine the most appropriate procedures or therapies for the purpose of assessment and/or management**
- 4 **ME 2.4 Institute and monitor nutritional support via enteral or parenteral routes**
- 5 **ME 2.4 Develop and implement plans for ongoing care, discharge, and follow-up**
- 6 **ME 4.1** Ensure patients receive appropriate end of life care
- 7 **ME 4.1 Determine the need and timing of referral to another health care professional**
- 8 **S 3.4** Integrate best evidence and clinical expertise into decision-making
- 9 **COM 1.5 Manage disagreements and emotionally charged conversations with patients and/or families**
- 10 **HA 1.1 Facilitate timely patient access to services and resources**
- 11 **L 2.1** Allocate health care resources for optimal patient care
- 12 **L 4.1** Manage time and prioritize tasks
- 13 **L 3.1 Plan work schedules for the service team**
- 14 **L 4.2 Run the service efficiently, safely and effectively**
- 15 **S 2.3** Supervise junior learners to ensure they work within their limits

Part B: Interprofessional care/supervision

- 1 **P 1.1 Exhibit appropriate professional behaviors**
- 2 **P 1.1 Respond punctually to requests from patients or other health care professionals**
- 3 **COL 1.2 Make effective use of the scope and expertise of other health care professionals**
- 4 **COL 2.1 Delegate tasks and responsibilities in an appropriate and respectful manner**

- 5 COL 1.3 Communicate effectively with other physicians and health care professionals**
- 6 S 2.4 Provide formal and informal teaching for junior learners**
- 7 S 2.5 Provide junior learners with useful timely feedback**

General Surgery: Core EPA #4

Providing follow-up care

Key Features:

- This EPA focuses on the care that occurs over the course of a disease process, with review of goals of care when applicable.
- This includes clinical reassessment, and further investigation and treatment as appropriate, applying evidence-based guidelines and demonstrating resource stewardship.
- It also includes communicating results to patients, and aspects of preventive care, health promotion and lifestyle modification as appropriate.
- This EPA includes complex cases. Examples include oncology patients receiving ongoing care or surveillance; patients with multidisciplinary care plans; patients transitioning to palliative goals of care; and patients who have experienced treatment complications.
- Observation of this EPA is based on a single patient encounter.

Assessment Plan:

Direct observation and/or case discussion or chart review by supervisor

Use Form 1. Form collects information on:

- Setting: emergency; inpatient; outpatient
- Complex case: yes; no
- Treatment decision: continue same; escalate/switch therapy; move to surgical approach; move to a palliative approach; discharge; other treatment

Collect 5 observations of achievement

- At least 2 in outpatient setting
- At least 2 complex patients
- A range of treatment decisions
- At least 1 transition to palliative care
- At least 2 different observers

Relevant Milestones:

- 1 ME 1.5** Perform a clinical assessment that addresses all relevant issues
- 2 ME 2.2** Interpret the results of investigations performed to monitor the condition and/or treatment
- 3 ME 2.2** Synthesize patient information to determine response to treatment, status of the disease, and/or presence of complications
- 4 ME 2.2** Integrate the patient's other medical problems, overall functioning, and current health status into the decision regarding plan of care
- 5 ME 3.1** Determine if the condition warrants surgical intervention and if the patient is a candidate for interventional procedures

- 6 **ME 2.4 Develop and implement a plan which may include further investigation, surveillance, medical treatment, and/or surgical intervention**
- 7 **ME 4.1 Determine the frequency and timing of future investigations and visits**
- 8 **S 3.4 Integrate best evidence and clinical expertise into decision-making**
- 9 **ME 4.1 Determine the need and timing of referral to another health care professional**
- 10 **COM 3.1 Convey information about diagnosis, prognosis and/or current health status clearly and compassionately**
- 11 **ME 2.3 Recognize and respond to signs that it is time to transition to a palliative care approach**
- 12 **ME 2.3 Share concerns about goals of care that are not felt to be achievable with the patient in a constructive and respectful manner**
- 13 **HA 1.1 Facilitate timely patient access to services and resources**
- 14 **HA 1.3 Incorporate prevention, health promotion and health surveillance into patient interactions**

General Surgery: Core EPA #5

Performing procedures on the stomach and duodenum

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the stomach and duodenum. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: mobilization of stomach, including hiatus; gastrostomy including PEG; control of hemorrhage and/or perforation; resection of stomach; anastomosis to stomach; and Kocherization of duodenum.
- These skills may be observed in a range of procedures. Examples include anti-reflux surgery, partial or total gastrectomy, paraesophageal hernia, bariatric and metabolic surgery, distal esophagectomy, Whipple's procedure, surgical treatment of peptic ulcer disease and acute complications, and traumatic injury of stomach and duodenum.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Setting: OR; ICU; endoscopy suite
- Type of procedure: urgent; elective
- Presentation: malignant; benign; bleeding; other presentation
- Procedure: anti-reflux surgery; partial/total gastrectomy; paraesophageal hernia; bariatric and metabolic surgery; distal esophagectomy; Whipple's procedure; surgical treatment of peptic ulcer disease and acute complications; traumatic injury of stomach and duodenum; other (write in)
- Surgical tasks (select all that apply): mobilization of stomach, including hiatus; gastrostomy including PEG; control of hemorrhage and/or perforation; resection of stomach; anastomosis to stomach; Kocherization of duodenum
- Complexity: yes; no

Collect 12 observations of achievement

- At least 2 of each surgical task
- At least 1 resection of stomach in a malignant case
- At least 2 different observers, including at least 1 attending surgeon
- At least 6 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**

- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #6

Performing procedures on the small bowel

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the small bowel. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: lysis of adhesions, resection and anastomosis, stoma creation, stoma closure, feeding jejunostomy insertion, and repair of enterotomy.
- These skills may be observed in a range of procedures. Examples include lysis of adhesions, small bowel resection with or without anastomosis, ileostomy creation, ileostomy closure, feeding jejunostomy, stricturoplasty, repair of enterotomy, and trauma repair.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Type of procedure: urgent; elective
- Presentation: benign; malignant; bleeding; other presentation
- Procedure: lysis of adhesions; small bowel resection with or without anastomosis; ileostomy creation; ileostomy closure; feeding jejunostomy; stricturoplasty; repair of enterotomy; trauma repair
- Surgical tasks (select all that apply): lysis of adhesions; resection and anastomosis; stoma creation; stoma closure; feeding jejunostomy insertion; repair of enterotomy
- Complexity: yes; no

Collect 12 observations of achievement

- At least 2 of each surgical task
- At least 2 different observers
- At least 1 general surgeon observer
- At least 6 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**

- 5 **ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #7

Performing procedures on the appendix and colon

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the colon. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: colon resection, anastomosis, mobilization, vascular control, and stoma creation.
- These skills may be observed in a range of procedures. Examples include appendectomy, ileocolic resection, right hemicolectomy, left hemicolectomy, sigmoid colon resection, subtotal colectomy, colostomy creation, colostomy reversal, Hartmann's resection, Hartmann's reversal, proctocolectomy, and traumatic injury of colon.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Type of procedure: urgent; elective
- Presentation: benign; malignant; other presentation
- Procedure (select all that apply): appendectomy; ileocolic resection; right hemicolectomy; left hemicolectomy; sigmoid colon resection; subtotal colectomy; colostomy creation; colostomy reversal; Hartmann's resection; Hartmann's reversal; proctocolectomy; traumatic injury of colon; other procedure
- Surgical tasks (select all that apply): colon resection; anastomosis; mobilization; vascular control; stoma creation
- Complexity: yes; no

Collect 18 observations of achievement

- At least 2 of each surgical task
- At least 1 left sided colon resection
- At least 1 emergent colon resection
- At least 2 different observers
- At least 9 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical**

procedure

- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #8

Performing procedures on the rectum and anus

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the rectum and anus. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: mobilization of the rectum, perineal dissection, vascular control, drainage of perineal sepsis, examination under anesthesia, excision of benign lesions, management of hemorrhoids, sphincterotomy, fistulotomy and seton placement, and biopsy.
- These skills may be observed in a range of procedures. Examples include proctectomy/low anterior resection, including total mesorectal excision (TME); abdominal perineal resection; examination under anesthesia; proctocolectomy; hemorrhoidectomy (all modalities); sphincterotomy; surgical management of anorectal fistula; drainage of abscess; rectal prolapse procedures; rectal foreign body removal; transanal excision of lesions; and traumatic injury to the rectum and anus.
- This EPA also includes performance of anoscopy and rigid sigmoidoscopy.

Assessment plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Type of procedure: urgent; elective
- Presentation: malignant; benign; bleeding; other presentation
- Procedure: proctectomy/low anterior resection, including total mesorectal excision (TME); abdominal perineal resection; examination under anesthesia; proctocolectomy; hemorrhoidectomy (all modalities); sphincterotomy; surgical management of anorectal fistula; drainage of abscess; rectal prolapse procedures; rectal foreign body removal; transanal excision of lesions; traumatic injury to the rectum and anus; anoscopy; rigid sigmoidoscopy; other (write in)
- Surgical tasks (select all that apply): mobilization of the rectum; perineal dissection; vascular control; drainage of perineal sepsis; examination under anesthesia; excision of benign lesions; management of hemorrhoids; sphincterotomy; fistulotomy and seton placement; biopsy; anoscopy; rigid sigmoidoscopy
- Complexity: yes; no

Collect 18 observations of achievement

- At least 1 of each surgical task
- At least 2 different observers
- At least 9 observations by faculty

Relevant Milestones:

- 1 **P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 **ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 **ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 **ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 **ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #9

Performing procedures on the hepatobiliary system

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the hepatobiliary system. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: mobilization of liver, wedge resection/biopsy of liver, dissection of biliary tree, dissection of gallbladder, intraoperative cholangiogram, common bile duct (CBD) drainage, biliary-enteric anastomosis, and hemorrhage control.
- These skills may be observed in a range of procedures. Examples include hepatic resection, cholecystectomy, CBD exploration, CBD resection and biliary reconstruction, Whipple, organ harvest, liver transplantation, and repair of traumatic injury to liver and common bile ducts.
- This EPA may be observed in the simulation setting.

Assessment plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Setting: OR; simulation lab
- Type of procedure: urgent; elective
- Presentation: malignant; benign; bleeding; other presentation
- Complexity: yes; no
- Procedure: hepatic resection; cholecystectomy; CBD exploration; CBD resection and biliary reconstruction; Whipple; organ harvest; liver transplantation; repair of traumatic injury to liver and common bile ducts; other (write in)
- Surgical tasks (select all that apply): mobilization of liver; wedge resection/biopsy of liver; dissection of biliary tree; dissection of gallbladder; intraoperative cholangiogram; CBD drainage; biliary-enteric anastomosis; hemorrhage control

Collect 13 observations of achievement

- At least of 2 each of the following surgical tasks: mobilization of liver; wedge resection/biopsy of liver; dissection of biliary tree; dissection of gallbladder; and intraoperative cholangiogram
- At least 1 dissection of gallbladder must be complex
- At least 1 CBD drainage (may be completed in simulation)
- At least 1 biliary-enteric anastomosis
- At least 1 hemorrhage control
- At least 2 different observers
- No more than 2 in simulation setting
- At least 7 observations by faculty

Relevant Milestones:

- 1 **P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 **ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 **ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 **ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 **ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #10

Performing procedures on the pancreas

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the pancreas. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: surgical exposure of the pancreas, resection of the pancreas, and drainage of peripancreatic fluid collections.
- These skills may be observed in a range of procedures. Examples include Whipple, operative management of pancreatic pseudocystic lesions, distal pancreatectomy, total pancreatectomy, surgical management of chronic pancreatitis, and traumatic injury of pancreas.

Assessment Plan:

Direct observation by general surgeon

Use Form 2. Form collects information on:

- Presentation: malignant; benign; bleeding
- Procedure: Whipple; operative management of pancreatic pseudocystic lesions; distal pancreatectomy; total pancreatectomy; surgical management of chronic pancreatitis; traumatic injury of pancreas; other (write in)
- Surgical tasks (select all that apply): surgical exposure of the pancreas; resection of the pancreas; drainage of peripancreatic fluid collections
- Complexity: yes; no

Collect 2 observations of achievement

- At least 1 observation by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**

- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #11

Performing procedures on the spleen

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients requiring splenectomy.
- Observation focuses on the following surgical skills: mobilization of spleen, and control of hemorrhage.
- This EPA may be observed in the simulation setting.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Setting: OR; sim-trauma course
- Type of procedure: elective; emergent
- Technique: open; laparoscopic
- Tasks (select all that apply): mobilization of spleen; control of hemorrhage

Collect 2 observations of achievement

- At least 1 emergent or sim-trauma setting
- No more than 1 in simulation setting
- At least 1 observation by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**

- 9 **COL 1.2** Make effective use of operative assistants
- 10 **P 1.1** **Work within personal limits, asking for help as needed**
- 11 **COL 1.2** **Work effectively with the OR team**
- 12 **COM 5.1** Document the surgical procedure in a complete and timely manner

General Surgery: Core EPA #12

Performing procedures on the lymph nodes

Key Features:

- This EPA focuses on the surgical approach to the lymphatic system, and performing surgical techniques for lymph node sampling and clearance. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: lymph node biopsy and/or excision, and sentinel lymph node localization.
- These skills may be observed in a range of procedures. Examples include sentinel lymph node biopsy, surgical lymph node biopsy, modified radical mastectomy, ALND, and neck dissection.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Procedure: sentinel lymph node biopsy; surgical lymph node biopsy; modified radical mastectomy; ALND; neck dissection; other procedure
- Surgical tasks (select all that apply): lymph node biopsy and/or excision; sentinel lymph node localization

Collect 4 observations of achievement

- At least 1 ALND
- At least 1 of each surgical task
- At least 2 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**

- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #13

Performing procedures on the breast

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with benign and malignant diseases of the breast. It does not include the lymph node portion of breast cancer management, as it is included in the EPA about “performing procedures on the lymph nodes”. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: incision and/or drainage of abscess, complete resection of breast, partial resection of breast with localization, partial resection of breast without localization, and sparing of skin and/or nipple.
- These skills may be observed in a range of procedures. Examples include drainage of abscess, duct excision, lumpectomy with or without localization, mastectomy, modified radical mastectomy, and core needle biopsy.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Procedure: drainage of abscess; duct excision; lumpectomy with or without localization; mastectomy; modified radical mastectomy; core needle biopsy; other procedure
- Surgical tasks (select all that apply): incision and/or drainage of abscess; complete resection of breast; partial resection of breast with localization; partial resection of breast without localization; sparing of skin and/or nipple
- Complexity: yes; no

Collect 10 observations of achievement

- At least 2 partial resections of breast without localization
- At least 2 partial resections of breast with localization
- At least 2 complete resections of breast
- At least 1 each of the following: incision and/or drainage of abscess and sparing of skin and/or nipple
- At least 2 different observers
- At least 5 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**

- 4 **ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 **ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #14

Performing procedures on the abdominal wall and hernia

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in patients with disorders of the abdominal wall and with hernias. It does not require completion of the surgical procedure from start to finish.
- Observation focuses on the following surgical skills: identification and dissection of sac/hernia orifice, repair of defect (+/- prosthetic), and preservation of spermatic cord.
- These skills may be observed in a range of procedures. Examples include inguinal hernia, femoral hernia, incisional hernia, umbilical hernia, complex abdominal hernia, including parastomal hernia or loss of abdominal domain, temporary abdominal wall closure, management of abdominal compartment syndrome, management of loss of abdominal domain, and repair of recurrent groin hernia.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Type of procedure: elective; emergent
- Method: mesh; non-mesh
- Procedure: inguinal hernia; femoral hernia; incisional hernia; umbilical hernia; complex abdominal hernia, including parastomal hernia or loss of abdominal domain; temporary abdominal wall closure; management of abdominal compartment syndrome; management of loss of abdominal domain; repair of recurrent groin hernia
- Surgical tasks (select all that apply): identification and dissection of sac/hernia orifice; repair of defect (+/- prosthetic); preservation of spermatic cord
- Complex: yes; no

Collect 10 observations of achievement of the following tasks:

- At least 1 emergent procedure
- At least 2 in each region (abdominal wall, groin)
- At least 1 temporary abdominal wall closure
- At least 2 of each surgical task
- At least 2 different observers
- At least 5 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**

- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #15

Performing procedures on the skin and soft tissue

Key Features:

- This EPA focuses on performing surgical procedures for patients with disorders of the skin and soft tissues.
- This includes performing the procedures from start to finish.
- Examples of procedures include excision of benign skin lesions, excision of malignant skin lesions, excision of benign soft tissue lesions, toenail resection, surgical treatment of pilonidal disease, debridement of complicated soft tissue infections, and incision and drainage of soft tissue abscess.

Assessment Plan:

Direct observation by general surgeon, plastic surgeon or fellow

Use Form 2. Form collects information on:

- Presentation: necrotizing skin; soft tissue infection; benign or malignant skin lesion
- Procedure: excision of benign skin lesion; excision of malignant non-melanoma skin lesion; excision of malignant melanoma; excision of benign soft tissue lesion; toenail resection; surgical treatment of pilonidal disease; debridement of complicated soft tissue infection; incision and drainage of soft tissue abscess

Collect 8 observations of achievement

- At least 1 soft tissue infection
- At least 1 of each surgical task
- At least 2 different observers
- At least 4 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**

- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #16

Performing procedures for patients with traumatic injuries

Key Features:

- This EPA may be observed in patients undergoing surgery for traumatic injury, in patients who have had iatrogenic injury, in operative cases requiring application of relevant surgical skills (e.g. tracheostomy in patients undergoing head and neck exploration), and in the simulation setting.
- This EPA includes the following skills: surgical airway; resuscitative thoracotomy; neck exploration and exposure of major vessels, esophagus, and trachea; control and management of visceral injury; control and management of pelvic vascular bleeding; repair of diaphragm; simple bladder repair; trauma laparotomy; control and management of intraabdominal vascular bleeding; exposure of the retroperitoneum; chest tube in a complex patient (obese, redo, unstable); and tracheostomy.
- For achievement of this EPA, skills may be observed in either the clinical or simulation setting EXCEPT the following, which must be observed in the clinical setting: trauma laparotomy; control and management of intraabdominal vascular bleeding; exposure of the retroperitoneum; chest tube in a complex patient (obese, redo, unstable); and tracheostomy.

Assessment Plan:

Direct observation by general surgeon, subspecialty trainee, simulation supervisor/facilitator, or indirect observation (review of simulation course assessment) by program director if simulation supervisor is not affiliated with home university

Use Form 2. Form collects information on:

- Procedure: trauma laparotomy; trauma resuscitation; tracheostomy; other (write in)
- Simulation: yes; no
- Surgical tasks (select all that apply): trauma laparotomy; control and management of visceral injury; control and management of intraabdominal vascular bleeding; control and management of pelvic vascular bleeding; exposure of the retroperitoneum; repair of diaphragm; simple bladder repair; chest tube in a complex patient (obese, redo, unstable); surgical airway; tracheostomy; resuscitative thoracotomy; neck exploration and exposure of major vessels, esophagus, or trachea

Collect 10 successful observations of achievement

- At least 1 trauma laparotomy
- At least 3 different tasks
- Surgical tasks may be observed in either the clinical or simulation setting EXCEPT the following, which must be observed in the clinical setting: trauma laparotomy; control and management of intraabdominal vascular bleeding; exposure of the retroperitoneum; chest tube in a complex patient (obese, redo, unstable); and tracheostomy
- At least 5 observations by faculty

Relevant Milestones:

- 1 **P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 **ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 **ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 **ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 **ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 **ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 **ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 **ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 **COL 1.2 Make effective use of operative assistants**
- 10 **P 1.1 Work within personal limits, asking for help as needed**
- 11 **COL 1.2 Work effectively with the OR team**
- 12 **COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #17

Performing the skills of minimally invasive surgery (MIS)

Key Features:

- This EPA focuses on performance of surgical approaches and techniques used in minimally invasive surgery.
- Observation focuses on the following surgical skills: knot tying and/or suturing; intracorporeal stapling; and diagnostic laparoscopy for assessment of abdominal cavity, including running the small bowel.
- These skills may be observed in any laparoscopic procedure.
- This EPA may include managing adverse events that may occur during MIS, e.g., converting to open procedure, and control of bleeding.

Assessment Plan:

Direct observation by general surgeon and/or subspecialty trainee

Use Form 2. Form collects information on:

- Surgical tasks (select all that apply): knot tying and/or suturing; intracorporeal stapling; diagnostic laparoscopy for assessment of abdominal cavity

Collect 4 observations of achievement

- At least 1 of each surgical task
- At least 2 different observers
- At least 2 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**
- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and**

forward progression

- 9 **COL 1.2** Make effective use of operative assistants
- 10 **P 1.1** **Work within personal limits, asking for help as needed**
- 11 **COL 1.2** **Work effectively with the OR team**
- 12 **COM 5.1** Document the surgical procedure in a complete and timely manner

General Surgery: Core EPA #18

Performing procedures for patients with disorders of the thyroid and/or parathyroid glands

Key Features:

- This EPA focuses on performance of surgical approaches and techniques in thyroidectomy, partial thyroidectomy and/or parathyroidectomy procedures.
- Observation focuses on the following surgical skills: appropriate landmarking for the incision; neck dissection; identification of the major vessels, airway, and nerves; vascular control; identification of the parathyroid glands; and closure of the incision.

Assessment Plan:

Direct observation by surgeon or subspecialty trainee

Use Form 2. Form collects information on:

- Diagnosis: primary hyperparathyroidism; secondary/tertiary hyperparathyroidism; benign thyroid disease; malignant thyroid disease
- Procedure: total thyroidectomy; hemithyroidectomy; parathyroidectomy
- Surgical tasks (select all that apply): appropriate landmarking for the incision; neck dissection; identification of the major vessels, airway & nerves; vascular control; identification of the parathyroid glands; closure of the incision

Collect 3 observations of achievement

- At least 1 of each surgical task
- At least 2 observations by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the procedure, reviewing relevant investigations and pre-operative assessments/consults**
- 2 ME 3.4 Set-up, position, and drape the patient for the procedure**
- 3 ME 5.2 Participate in the surgical safety checklist or equivalent**
- 4 ME 1.4 Apply knowledge of anatomy, key landmarks, and the surgical procedure**
- 5 ME 3.4 Use surgical instruments and equipment correctly and in a fluid manner**
- 6 ME 3.4 Perform safe dissection of relevant structures and tissue layers with gentle tissue handling**
- 7 ME 3.4 Anticipate, recognize, and respond to intraoperative challenges**

- 8 ME 3.4 Demonstrate intraoperative judgement, fluidity of movement, and forward progression**
- 9 COL 1.2 Make effective use of operative assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COL 1.2 Work effectively with the OR team**
- 12 COM 5.1 Document the surgical procedure in a complete and timely manner**

General Surgery: Core EPA #19

Performing esophagogastroduodenoscopy

Key Features:

- This EPA includes the pre-procedural skills of setting up the patient and equipment, performing the technical skills of diagnostic and therapeutic procedures, and working effectively with the endoscopy team.
- This EPA includes delineation of normal versus abnormal findings, description of lesions using standardized nomenclature, and consideration of differential diagnosis.
- It also includes achieving hemostasis via a variety of techniques.
- This EPA may be observed in the endoscopy suite, operating room, intensive care unit or emergency department.

Assessment Plan:

Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee

Use Form 2. Form collects information on:

- Urgency: yes; no
- Type of procedure: elective; non-elective; therapeutic
- Findings: normal; abnormal

Collect 10 observations of achievement

- At least 2 therapeutic procedures
- At least 2 different observers
- At least 5 observations by faculty

Relevant Milestones:

- 1 ME 3.4 Provide analgesia and sedation to ensure patient safety and comfort**
- 2 ME 3.4 Assemble and verify endoscope function**
- 3 ME 3.4 Intubate the esophagus under direct vision**
- 4 ME 3.4 Maintain luminal view**
- 5 ME 3.4 Achieve clear visualization of the mucosa using a variety of techniques, including air, water and suction**
- 6 ME 3.4 Identify key anatomic landmarks and clinically relevant findings**
- 7 ME 3.4 Perform tissue biopsies in quantity and quality as appropriate to indication**

- 8 **ME 3.4 Use diathermy and other therapeutic techniques appropriately and safely**
- 9 **ME 3.4** Demonstrate appropriate pace and progress during insertion and withdrawal
- 10 **ME 3.4** Identify and respond to immediate complications of the procedure if applicable
- 11 **COL 1.2** Communicate effectively with nurses and/or assistants
- 12 **ME 3.4** Demonstrate appropriate care of the endoscope
- 13 **P 1.1** Work within personal limits, asking for assistance as needed
- 14 **COM 3.1 Convey the results of endoscopy and further management plan to the patient/family**
- 15 **COM 5.1** Document findings of an endoscopic procedure in a complete and timely manner

General Surgery: Core EPA #20

Performing colonoscopies

Key Features:

- This EPA focuses on the pre-procedural, intra-procedural and post-procedural skills of colonoscopy, including technical and non-technical aspects of the procedure.
- This EPA includes the delineation of normal versus abnormal findings, description of lesions using standardized nomenclature, consideration of differential diagnosis, and intra-procedural decision making as a result of clinical significant findings.
- This EPA may be observed during a colonoscopy performed for any indication.
- Entrustment of this EPA requires successful terminal ileal intubation in at least some procedures and polypectomy in at least some procedures.

Assessment Plan:

Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee

Use Form 2. Form collects information on:

- Setting: endoscopy suite; ambulatory clinic; operating room; ICU
- Procedure (select all that apply): colonoscopy; terminal ileal intubation; polypectomy
- Type of procedure: elective; non-elective
- Findings: normal; abnormal
- Polyp: <1cm; >1 cm

Collect 10 observations of achievement

- At least 6 colonoscopies to the level of the terminal ileum
- At least 5 polypectomies including 2 >1cm
- At least 2 different observers
- At least 5 observations by faculty

Relevant Milestones:

- 1 ME 3.4 Provide analgesia and sedation to ensure patient safety and comfort**
- 2 ME 3.4 Assemble and verify endoscope function**
- 3 ME 3.4 Maintain luminal view**
- 4 ME 3.4 Use torque steering appropriately**
- 5 ME 3.4 Recognize and resolve loop formation**
- 6 ME 3.4 Use position change and abdominal pressure to aid luminal views**
- 7 ME 3.4 Identify key anatomic landmarks and clinically relevant findings**

- 8 **ME 3.4 Achieve clear visualization of the mucosa using a variety of techniques, including air, water and suction**
- 9 **ME 3.4 Perform tissue biopsies in quantity and quality as appropriate to indication**
- 10 **ME 3.4 Use diathermy and other therapeutic techniques appropriately and safely**
- 11 **ME 3.4 Demonstrate appropriate pace and progress during insertion and withdrawal**
- 12 **ME 3.4 Identify and respond to immediate complications of the procedure if applicable**
- 13 **COL 1.2** Communicate effectively with nurses and/or assistants
- 14 **P 1.1** Work within personal limits, asking for assistance as needed
- 15 **COM 3.1 Convey the results of endoscopy and further management plan to the patient/family**
- 16 **COM 5.1** Document findings of an endoscopic procedure in a complete and timely manner

General Surgery: Core Special Assessment #1

Completing a scholarly project

Key Features:

- This may include scholarly activities related to clinical or basic science research, patient safety, quality improvement or surgical education.
- The resident's involvement in a scholarly activity must include the following: generation of question/hypothesis, literature review, project design, ethics application, data collection, data analysis/statistics, data synthesis and manuscript preparation and/or presentation of work.
- Assessment is based on the submission of a completed scholarly project, and may also include observation of the presentation of the scholarly work at a local, national or international meeting.

Assessment Plan:

Review of resident's submission of the completed scholarly project by research supervisor, program director, or delegate (i.e. research director)

Use Form 4

Collect 1 observation of achievement

Relevant Milestones:

- 1** **L 4.1** Organize work to manage clinical, scholarly, and other responsibilities
- 2** **S 4.4** Identify, consult, and collaborate with content experts and others in the conduct of scholarly work
- 3** **S 4.4** Collect data for a scholarly project
- 4** **S 4.4** Perform data analysis
- 5** **S 4.4** Integrate existing literature and findings of data collection
- 6** **S 4.4** Identify areas for further investigation
- 7** **S 4.5** Summarize and communicate the findings of research and scholarly inquiry

General Surgery: Core Special Assessment #2

Delivering scholarly teaching to a variety of audiences, including peers, junior trainees, and/or other health professionals

Key Features:

- This SA focuses on the skills of critical appraisal, as well as presentation and teaching skills.

Assessment Plan:

Direct observation by surgeon

Use Form 1. Form collects information on

- Type of activity: journal club; grand rounds; case presentation; other activity

Collect 2 observations of achievement

Relevant Milestones:

- 1** **S 2.4** Identify the learning needs and desired learning outcomes of others
- 2** **S 2.4** Develop learning objectives for a teaching activity
- 3** **S 3.3** Critically evaluate the integrity, reliability and applicability of health related research and literature
- 4** **S 3.4** Integrate best evidence and clinical expertise
- 5** **S 2.4** Present the information in an organized manner to facilitate understanding
- 6** **S 2.4** Use audiovisual aids effectively
- 7** **S 2.4** Provide adequate time for questions and discussion

General Surgery: Transition to Practice EPA #1

Managing an outpatient clinic

Key Features:

- This EPA includes ensuring that patients are evaluated, investigations are ordered, follow-up is planned, including operative intervention if required, and documentation/dictation is completed, in addition to collaborating effectively with other health care professionals and support staff.
- This EPA requires managing patients efficiently in an ambulatory/outpatient setting, being cognizant of wait-times, prioritizing patients, and using resources appropriately.
- This EPA may be observed in clinics located in a hospital or private office setting.
- The observation of this EPA is based on at least one half-day of clinic.

Assessment Plan:

Direct and indirect observation of clinic management by general surgeon

Use Form 1. Form collects information on:

- Patient (select all that apply): pre-operative; post-operative; requires further investigation; follow-up

Collect 2 observations of achievement

- At least 2 clinics of at least a half-day each
- At least 2 different observers

Relevant Milestones:

- 1 L 4.1 Manage time effectively in the ambulatory clinic**
- 2 ME 2.4 Establish patient centered-management plans**
- 3 S 3.4 Integrate best evidence and clinical expertise into decision-making**
- 4 ME 3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for a proposed procedure or therapy**
- 5 L 4.2 Book operative cases with appropriate urgency, duration, and equipment and patient preparation**
- 6 L 2.1 Allocate health care resources for optimal patient care**
- 7 ME 1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice**
- 8 COM 5.1 Document clinical encounters in an accurate, complete, and timely manner**

- 9** **COL 1.2** Negotiate overlapping and shared care responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
- 10** **L 4.1** Review and act on test results in a timely manner
- 11** **L 4.1** Integrate supervisory and teaching responsibilities into the overall management of the clinic
- 12** **HA 1.1** Work with patients to address the determinants of health that affect them and their access to needed health services or resources

General Surgery: Transition to Practice EPA #2

Managing the day's list of endoscopy procedures

Key Features:

- This EPA integrates procedural abilities for individual cases with the ability to work effectively in the endoscopy unit, including managing the case load for a list of procedures, prioritizing, working effectively with other health professionals, and ensuring appropriate resource utilization.
- This EPA may be observed in any mix of endoscopy procedures performed on inpatients or ambulatory patients, and for any indication or acuity.
- Observation of this EPA is based on a day or half-day procedure list.

Assessment Plan:

Direct observation by general surgeon or gastroenterologist

Use Form 1.

Collect at least 2 observations of achievement

- At least 2 different observers

Relevant Milestones:

- 1 P 1.2** Prepare for the day, reviewing the list of planned procedures
- 2 ME 3.4** Anticipate and prepare for technical challenges and/or significant findings
- 3 ME 3.4** Perform endoscopic procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances
- 4 ME 4.1** Propose and implement plans for ongoing care, follow-up on investigations, and further treatment or referral
- 5 L 1.2** Adhere to occupational safety procedures to ensure patient, personal and team safety
- 6 L 4.1** Manage time effectively to maintain patient and endoscopy flow
- 7 ME 3.4** Demonstrate appropriate use and care of endoscopic equipment
- 8 P 1.2** Maintain a log of procedures and their outcomes, as a source of information regarding personal performance

General Surgery: Transition to Practice EPA #3

Managing the day's list of operative procedures

Key Features:

- This EPA integrates procedural abilities for individual cases with the ability to work effectively in the operating room: managing the case load for a list of procedures, prioritizing, communicating and working effectively with other health professionals, including directing surgical assistants, teaching junior trainees and resource utilization.
- This EPA may be observed in any mix of Core operative procedures, performed for inpatient or ambulatory patients, and for any indication or acuity with more than one case per list.
- Observation of this EPA is based on managing a full day's OR list and is to be documented at the end of a procedure list.

Assessment Plan:

Direct observation by general surgeon or subspecialty trainee, incorporating feedback from anesthesiologist and operating room charge nurse or OR nurses

Use Form 1. Form collects information on:

- Patient types (select all that apply): inpatient; outpatient

Collect 2 observations of achievement

- Mix of inpatients and outpatients
- At least 2 different observers
- At least 1 observation by faculty

Relevant Milestones:

- 1 P 1.2 Prepare for the day, reviewing the list of planned procedures**
- 2 ME 3.4 Anticipate and prepare for technical challenges and/or significant findings**
- 3 ME 3.4 Select appropriate materials and equipment for the procedure**
- 4 ME 3.4 Perform surgical procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances**
- 5 ME 3.4 Manage unexpected intraoperative findings and perioperative issues, adjusting the procedure as appropriate**
- 6 ME 4.1 Establish plans for post-operative care**
- 7 COM 3.1 Convey information about the procedure, operative findings, and patient status to the family clearly and compassionately**

- 8 **COM 5.1 Document surgical procedures in an accurate complete and timely manner**
- 9 **S 2.3 Allocate appropriate time for junior learners' educational activities while ensuring patient care, efficiency, resources, and safety are maintained**
- 10 **P 4.1 Maintain professional clinical performance in demanding or stressful clinical settings**

General Surgery: Transition to Practice EPA #4

Performing therapeutic endoscopic interventions of the upper and lower gastrointestinal tract (OPTIONAL)

Key Features:

- Achievement of this EPA is optional.
- This EPA includes achieving hemostasis via a variety of techniques as well as performing dilation, foreign body removal, and complex colonic polypectomy.
- This EPA must be observed in some patients that are actively bleeding.

Assessment Plan:

Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee

Use Form 2. Form collects information on:

- Case mix: hemostasis; dilation; polypectomy; foreign body removal; endoluminal stent insertion; colonic decompression
- Actively bleeding: yes; no
- Setting: OR; ER; endoscopy; ICU

Collect 15 observations of achievement

- At least 2 hemostasis in active bleeding
- At least 2 dilations
- At least 2 foreign body
- At least 5 polypectomy >1 cm
- At least 1 endoluminal stent insertion
- At least 1 colonic decompression
- At least 2 different observers
- At least 8 observations by faculty

Relevant Milestones:

- 1 ME 3.4 Provide analgesia and sedation to ensure patient safety and comfort**
- 2 ME 3.4 Select and gather ancillary equipment**
- 3 ME 3.4 Manipulate endoscope appropriately, achieving stabilization, orientation and direction**
- 4 ME 3.4 Use appropriate strategies for endoscope advancement and mucosal visualization**
- 5 ME 3.4 Identify key anatomic landmarks and clinical relevant findings**
- 6 ME 3.4 Use diathermy and other therapeutic techniques appropriately and safely**

- 7 ME 3.4 Determine that the procedure is complete, e.g. hemostasis achieved**
- 8 ME 3.4 Identify and respond to immediate complications of the procedure if applicable**
- 9 COL 1.2 Communicate effectively with nurses and/or assistants**
- 10 P 1.1 Work within personal limits, asking for help as needed**
- 11 COM 3.1 Convey the results of endoscopy and further management plan to the patient/family**
- 12 COM 5.1 Document findings of an endoscopic procedure in a complete and timely manner**

General Surgery: TTP Special Assessment # 1

Performing the administrative, human resource and financial aspects of independent practice

Key Features:

- This special assessment addresses the practical aspects and requirements of independent surgical practice, including participation in the administrative activities of the discipline, and preparation for practice including maintenance of certification, arrangements for licensure and medicolegal protection, and billing and financial management
- Training experiences at this stage focus on instruction in these areas
- This special assessment collects evidence of practical experience in these areas, which may include shadow billing; triaging referrals; participating in hospital and/or program committees; updating ATLS certification; updating case logs for future credentialing; reflecting on case logs, procedural outcomes and personal performance; applying for licensure; attending seminars related to practice management; and maintaining a portfolio for continuing professional development (i.e. Mainport).
- Observation of this special assessment is based on a supervisor reviewing the resident's summary of this evidence and providing a written narrative report to the Competence Committee.

Assessment Plan:

Review of portfolio of activities by supervisor

Use Form 4

Collect 1 observation of achievement