Rotation Specific Objectives: CTU # 4 / Nightfloat: Acute care service These Rotation specific objectives cover FOD, Core, TTP as demonstrated by the appropriate EPA's (see below). It is expected that the EPA's will be completed as they pertain to the rotation and that clinical knowledge be acquired in a graduated fashion. The competencies are also covered in the academic curriculum.

Rotation Description CTU # 4 is staffed by the adult General surgeons in the Division of Surgery. The emphasis of the clinical experience on CTU # 4 is on acute care surgery. Many competencies are also experienced on other rotations. Dedicated OR time is available (5 days per week). Attending staff cover the service one week at a time (from Monday to Sunday) with call relief by other attending staff on Monday, Wednesday, and Friday nights. Senior residents will cover the service one block (4 weeks) at a time. The Senior resident on the service is also the Trauma Team Captain. The competencies of trauma are included in this RSO as an Appendix.

Goals and Objectives

FOD, Core TTP:

a. Knowledge

- Well organised understanding of pathology and pathophysiology associated with trauma, the acute abdomen, soft tissue infections, hernias and gallbladder disease and perianal sepsis (see as per specific RCPSC goals of training in General surgery)

b) Skills

- Mastery of basic physician skills related to trauma, the acute abdomen, soft tissue infections, hernias and gallbladder disease and perianal sepsis
- Introduction to procedures associated with trauma the acute abdomen, soft tissue infections, hernias and gallbladder disease and perianal sepsis with *graduated* performance in the operating room appropriate for the stage of training
- Perform basic upper GI endoscopic evaluation in the emergent situation
- **At the end of this rotation the Resident in Surgical Foundations/ TTD will be able to:**
- Manage the ward with the guidance of a senior/chief resident.
- Recognize most common post-operative complications related to acute care surgery and deal with them appropriately.
- Arrange and facilitate efficient investigation of patients in the emergency department and on the surgical ward.

- Competently initiate opening and closing the abdominal incision
- Undertake simple skin and soft tissue biopsies
- Assist with complex and laparoscopic hepatobiliary cases (including insertion of ports, laparoscopic retraction)
- Start to develop skills in laparoscopic cholecystectomy and appendectomy
- Attain competency in the assessment of the trauma patient

- **At the end of this rotation the Resident in Core and Final Year will be able to (more details are found below):**
- Manage the ward with the guidance of a senior/chief resident (junior).
- Function as a coordinator and supervisor of junior house staff and students on the Acute care service involving preoperative, intraoperative and postoperative patient management delivered in step down unit, ICU and on the ward (senior)

c) Attitudes

- Communicates effectively with patients and families, colleagues & allied health professionals
- Professional behaviours (honesty, reliability, & confidentiality)

d) Academics

RC Competencies:

a) MEDICAL EXPERT

At the conclusion of the transition to practice the resident should meet all of the following objectives in spite of variations in rotation durations and resident exposure to acute care surgery.

1.4.1-. **Surgical anatomy**, including arterial supply, venous and lymphatic drainage, and innervation of (1-1.4.1.16) the anatomy associated with the acute abdomen, infections of the skin and subcutaneous tissue (to include breast and perianal region), abdominal wall and inguinal and femoral regions.
1.4.3. **Physiology** relevant to General Surgery, as they relate to surgical procedures in the acute setting:
1.4.4 **Pathology** as it relates to General Surgery in the acute setting

1.4.5 **Principles of antimicrobial prophylaxis**, antibiotic stewardship, and infection prevention and control
4.10**. Principles of endoscopy** 1.4.10.1. Equipment function, common equipment-related problems, and their solutions 1.4.10.2. Potential risks and complications of endoscopic procedures for patient, operator, and assistant, and the measures appropriate to minimize such hazards 1.4.10.3. Infection control and sedation, as relevant to the endoscopy suite
1.4.11. **Principles of nutrition** 1.4.11.1. Normal requirements for calories, carbohydrates, fat, protein, vitamins, trace elements, and minerals 1.4.11.2. Nutritional assessment techniques 1.4.11.3. Effects of trauma and illness on nutritional requirements 1.4.11.4. Indications for enteral and parenteral nutrition supplementation and their potential complications
1.4.12. **Principles of palliative care** 1.4.12.1. Definition and goals of palliative care 1.4.12.2. Role of surgery in the palliation of malignancy, including debulking, relief of gastrointestinal obstruction, and prevention of bleeding

Perform a patient-centred clinical assessment in the area of the
2.1 Prioritize issues to be addressed in a patient encounter
2.1.1 Recognize, resuscitate, and stabilize patients who have sustained major injuries, or are at risk of cardiopulmonary arrest
2.2 Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion
2.2.1. Gather a relevant clinical history
2.2.2. Identify and interpret the clinical significance of findings in a physical examination
2.2.3 Recognize findings suggestive of non-accidental injury
2.2.4. Select appropriate methods to stage malignancies 2.2.5. Select and interpret medical imaging 2.2.5.1. Radiography 2.2.5.2. Ultrasonography 2.2.5.3. Computed tomography (CT) 2.2.5.4. Magnetic resonance imaging (MRI) 2.2.5.5. Nuclear imaging 2.2.5.6. Positron emission tomography (PET)
2.2.6. Interpret the clinical relevance of laboratory and pathology reports
2.2.7. Determine the indications for, and benefits and risks of surgical intervention for the clinical presentation
2.2.8. Assess peri-operative risk
2.3 Establish goals of care in collaboration with patients and their families which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation 2.3.1. Identify opportunities for advance care planning discussions and explore the patient's values, wishes and preferences related to end-of life-care.

2.3.1.1. Apply knowledge of settings for end-of-life care, including home, hospice, palliative care units, and hospital.2.3.2 Establish the patient's preferences for goals of care and resuscitation, and review when changes occur in clinical status.

Establish a patient-centered management plan, including non-operative, preoperative, operative, and postoperative care for patients with the following conditions:

Stomach and Duodenum

2.4.8 Gastric foreign bodies
2.4.11 Peptic ulcer disease and its complications, including hemorrhage, perforation, and obstruction Long term complications after peptic ulcer surgery)

Small intestine

2.4.14 inflammatory conditions, including Crohn's disease, neutropenic enteritis, and radiation enteritis
2.4.15 Ischemia, including acute and chronic
2.4.17 Obstruction, including adhesions, intussuception and gall stones (2.4.16 neoplasms)
2.4.18 Other conditions, including infectious diseases, hemorrhage, foreign bodies, and short bowel syndrome
2.4.19 Post-operative complications, including ileus, anastomotic leaks, and entero-cutaneous fistulae

Colon Rectum

2.4.20. Appendicitis
2.4.21. Complications following colostomy
2.4.23. Diverticular disease and its complications
2.4.24. Hemorrhage
2.4.25. Infectious conditions, including conditions caused by Clostridium difficile and cytomegalovirus
2.4.26. Inflammatory conditions, including neutropenic colitis, radiation colitis, and inflammatory bowel diseases including Crohn's disease, ulcerative colitis, and microscopic colitis
2.4.27. Ischemia, including occlusive and non-occlusive disease
2.4.29 Obstruction

2.4.30 Perforation
2.4.31.3 Obstructed defecation
Anal and perianal conditions
2.4.32.1. Abscess
2.4.32.2. Anal fissure, including acute and chronic
2.4.32.5.Hemorroids
2.4.32.7.Puritus ani

Biliary Traact

2.4.38. Benign inflammatory processes
2.4.39. Biliary obstruction and its complications
2.4.40. Biliary tract injury
2.4.42. Stone formation and complications

Pancreas

2.4.45. Pancreatitis, including local and systemic

Breast

2.4.57 Mastalgia
2.4.58 Infection
Abdominal Wall
2.4.69.1.Direct inguinal herna
2.4.69.2.Femoral
2.4.69.3.Indirect
2.4.69.4.Lumbar
2.4.69.5 Obturator
2.4.69.6 Spigelian
2.4.69.7 Umbilical

Structural abnormalities resulting in the following hernias

2.4.71.1 Internal
2.4.70.2 Parastomal
2.4.70.3 Ventra
Inflammatory conditions
2.4.73.1 Hiradenitis suppurativa
2.4.73.2 Pilonidal disease

i) **Plan and perform procedures and therapies for the purpose of assessment and/or management**

3.1.3. Prophylactic use of anticoagulants 3.1.4. Prophylactic and therapeutic use of pharmacologic agents, including antibiotics and corticosteroids 3.1.5 Selection and timing of immunization prior to splenectomy 3.1.7. Selection of open or MIS approach based on relevant patient and operating environment factor
3.1.8. Endoscopy 3.1.8.1. Appropriate monitoring of patients undergoing upper GI endoscopy 3.1.8.2. Use of medications to facilitate endoscopic procedures, including sedatives, narcotic analgesics, and antispasmodic medications
3.2. Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy 3.2.1. Recognize and address challenges arising in emergency situations and when patient capacity to provide consent is limited
3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources 3.3.1. Triage patients appropriately for emergent, urgent or elective care and interventions 3.3.2. Select patients appropriately for intraoperative pathology consultations
3.4. Perform procedures in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances

Diagnostic Procedures and technical skills specific to Acute surgery

Demonstrate effective, appropriate, and timely performance of the following diagnostic procedures

Endoscopy

3.4.6. Diagnostic upper GI endoscopy and colonoscopy, which may include forceps biopsy
3.4.7. Upper GI endoscopy for hemostasis
3.4.8. Colonoscopy for hemostasis
3.4.9. Endoscopic polypectomy
3.4.10. Endoscopic foreign body removal
3.4.11. Insertion of feeding tubes
3.4.12. Management of complications of endoscopic procedures, including perforation of the gastrointestinal tract, hemorrhage, and infection

Skills of minimally invasive surgery

3.4.13. Patient positioning to optimize patient safety and to facilitate access during MIS procedures
3.4.14. Safe access to the peritoneal cavity using open and closed techniques
3.4.15. Port site selection, placement, and closure
3.4.16. Laparoscopic placement of sutures
3.4.17. Hemostasis

Have expert knowledge including indications, contraindications, complications and alternatives and ability to perform (not limited to: graduated approach)

3.4.20. Insertion of percutaneous endoscopic gastrostomy and open gastrostomy tubes
3.4.21. Operative management of the acute complications from bariatric surgery
3.4.22. Operative management of bleeding from duodenal and gastric ulcers
3.4.23. Operative management of complications from peptic ulcer disease
3.4.25. Bypass procedures for upper GI obstruction
3.4.28. Operative management of gastric volvulus
3.4.29. Operative management of small bowel obstruction
3.4.30. Creation of loop and end ileostomies, and their reversal
3.4.31. Insertion of feeding jejunostomy tubes
3.4.32. Reduction of intussusception
3.4.33. Segmental resection of the small bowel with or without anastomosis
3.4.34. Simple stricturoplasty
3.4.35. Enteric bypass
3.4.36. Repair of lacerations and enterotomies
3.4.38 Removal of foreign bodies
3.4.39. Resection with anastomosis of the intra-abdominal colon, including right, extended right, transverse, left, sigmoid, and total colectomies
3.4.40. Appendectomy
3.4.41. Diversion and defunctioning of the colon
3.4.42. Hartmann's resection and reversal
3.4.43. Repair of colonic fistulae, including colovesical, colovaginal, and coloenteric fistulae
3.4.44. Colonic lavage as part of another colonic surgical procedure
3.4.45. Diversion for benign or malignant ano-rectal disorders
3.4.46. Operative management of acute and chronic hemorrhoidal disease
3.4.47. Operative management of acute and chronic anal fissures

3.4.48. Operative management of uncomplicated perianal and perirectal abscesses
3.4.54. Removal of rectal foreign bodies
3.4.57. Cholecystectomy
3.4.58. Partial cholecystectomy
3.4.59. Common bile duct (CBD) exploration for choledocholithiasis
3.4.60. Cholecystostomy and tube decompression of the CBD for emergency management of severe infection
3.4.61 Operative management of necrotizing pancreatitis
3.4.67 Aspiration of breast cyst
3.4.68 Incision and drainage of breast abscess
3.4.72. Repair of hernias of the abdominal wall, groin, and diaphragm
3.4.73. Repair of abdominal wound dehiscence
3.4.74. Operative management of abdominal compartment syndrome and open abdomen
3.4.75. Operative management of the infected abdominal wall prosthesis
3.4.76 Surgical drainage of superficial abscesses
3.4.80 Surgical debridement of complicated infections
3.4.81. Operative management of pilonidal disease
3.4.82. Operative management of hidradenitis suppurativa

Provide perioperative care and surgical management in collaboration with subspecialty surgeons (for trauma and esophgus see Appendix Trauma and RSO for CTU 5)

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

Implement a patient-centred care plan that supports ongoing care, follow-up on. Investigations, response to treatment, and further consultation
4.1.1. Identify indications for consultation with other health care professionals
4.1.1.1. Provide referral for advanced operative or endoscopic procedures
4.1.1.2 Identify indications for and timing of consultation with medical and/or radiation oncologists
4.1.2. Provide follow-up on results of investigations and response to treatment
4.1.3. Recognize and manage complications
Perioperative complications related to pneumoperitoneum, 4.1.3.1.including acidosis, hypotension, hypoxia, and pneumothorax
4.1.3.2 Perioperative complications of abdominal access, including injuries.to the abdominal viscera and blood vessels
4.1.4. Provide management of and/or referral for end-of-life care

Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

5.1 Recognize and respond to harm from health care delivery, including patient safety incidents
5.2 Adopt strategies that promote patient safety and address human and system factors 5.2.1 Participate and/or lead in a pause or checklist immediately before surgical incision
5.2.2 Apply strategies to enhance patient and provider safety and reduce the risk of complications from surgical interventions

b) COMMUNICATOR

Establish professional therapeutic relationships with patients and their families

1.1. Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion
1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety
1.3. Recognize when the perspectives values, or biases of patients, patients' families, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly
1.4. Respond to a patient's non-verbal behaviours to enhance communication
1.5. Manage disagreements and emotionally charged conversations
1.5.1. Discuss autopsy and organ donation when appropriate
1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances 1.6.1 Apply a proactive approach to managing patient expectations and needs through the course of their illness

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

2.1 Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information
2.2 Provide a clear structure for and manage the flow of an entire patient encounter
2.2.1 Gather information accurately and effectively under time constraints
2.3 Seek and synthesize relevant information from other sources, including the.patient's family, with the patient's consent

Share health care information and plans with patients and their families

3.1 Share information and explanations that are clear, accurate, and timely, while assessing for patient and family understanding 3.1.1 Convey treatment options, including operative, nonoperative, interventional radiology, and endoscopic measures

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

4.1. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe
4.2 Assist patients and their families to identify, access, and make use of information.and communication technologies to support their care and manage their health
4.3. Use communication skills and strategies that help patients and their families make informed decisions regarding their health

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

5.1 Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements management
5.2 Communicate effectively using a written health record, electronic medical record,.or other digital technology
5.3. Share information with patients and others in a manner that enhances understanding and that respects patient privacy and confidentiality

COLLABORATOR

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

1.1 Establish and maintain positive relationships with physicians and other colleagues.in the health care professions to support relationship-centred collaborative care
1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
1.3 Engage in respectful shared decision-making with physicians and other colleagues.in the health care professions

Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts

2.1. Show respect toward collaborators

2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture

Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care

3.1. Determine when care should be transferred to another physician or health care professional

3.2. Demonstrate safe handover of care, using both oral and written communication, during a patient transition to a different health care professional, setting, or stage of care

Leader

Contribute to the improvement of health care delivery in teams, organizations, and systems

1.1 Apply the science of quality improvement to systems of patient care

1.1.1 Demonstrate awareness of guidelines for reporting surgical results

1.1 Contribute to a culture that promotes patient safety

1.3 Analyze patient safety incidents to enhance systems of care

1.3.1 Participate in reviews of patient complications and deaths

1.4 Use health informatics to improve the quality of patient care and optimize patient safety

Engage in the stewardship of health care resources

2.1 Allocate health care resources for optimal patient care

2.2 Apply evidence and management processes to achieve cost-appropriate care

2.2.1 Recognize the responsibility to forgo treatments that are futile

Demonstrate leadership in professional practice

3.1 Demonstrate leadership skills to enhance health care

3.2 Facilitate change in health care to enhance services and outcomes

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

4.1 Set priorities and manage time to integrate practice and personal

4.2 Manage personal professional practice(s) and career

4.3 Implement processes to ensure personal practice improvement

4.3.1 Maintain an electronic record of operative procedures performed, including treatment complications and surgical complications as a source of reflection on performance and stimulus for personal practice improvement

Health Advocate

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

1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources

1.2 Work with patients and their families to increase opportunities to adopt healthy behaviours

1.3 Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients

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

2.1 Work with a community or population to identify the determinants of health.affect them

2.2 Improve clinical practice by applying a process of continuous quality improvement 2.2.to disease prevention, health promotion, and health surveillance activities

2.3 Contribute to a process to improve health in the community or population they serve

2.3.2 Promote organ donation

Scholar

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

1.1 Develop, implement, monitor, and revise a personal learning plan to enhance professional practice

1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources

1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice

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

2.1. Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners

2.2. Promote a safe learning environment

2.3. Ensure patient safety is maintained when learners are involved
2.4. Plan and deliver learning activities
2.5. Provide feedback to enhance learning and performance
2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

3.Integrate best available evidence into practice

3.1. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that can address them
3.2. Identify, select, and navigate pre-appraised resources
3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature
3.4. Integrate evidence into decision-making in their practice

Professional

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

1.1 Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
1.2 Demonstrate a commitment to excellence in all aspects of practice
1.3.Recognize and respond to ethical issues encountered in practice
1.4. Recognize and manage conflicts of interest
1.5 Exhibit professional behaviors in the use of technology enabled communication

Surgical Foundations EPAs – Transition to Discipline

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
D1: Performing the preoperative preparation of patients for basic surgical procedures	Case discussion and/or review of documentation by supervisor or senior surgical assistant	None	1
D2: Recognizing and initiating early management for critically ill surgical patients	Direct observation or case discussion by supervisor or senior surgical assistant **with review of clinical documentation**	At least 1 in a clinical (not sim) setting At least 2 different assessors	

D3: Documenting clinical encounters	Direct observation or case discussion by supervisor or senior surgical assistant **with review of clinical documentation**	None	2
D4: Demonstrating handover technique	Direct observation by supervisor or senior surgical assistant	At least 1 in a clinical (not sim) setting At least 2 different assessors	2
D5: Demonstrating the ability to function in the operating room	Direct observation by supervisor or senior surgical assistant	None	1
D6: Suturing incisions	Direct observation by supervisor or senior surgical assistant	At least 1 wound > 5cm long At least 1 in a clinical (not sim) setting At least 2 different assessors	2
D7: Managing tubes, drains, and central lines	Direct observation or case discussion by supervisor (surgeon, fellow or senior resident)	2 different types of tubes / drains At least 1 in a clinical (not sim) setting At least 2 different assessors	2

*Unless otherwise specified, supervisor = attending surgeon, fellow or senior resident
* Gold shaded rows are high likelihood and/or high priority

Surgical Foundations EPAs – Foundations of Discipline

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
F1: Providing initial management for critically ill patients	Direct observation or case discussion by supervisor or physician	At least 2 different presentations At least 2 different assessors No more than 1 in a simulation setting	3
F2: Inserting central venous lines	Direct observation by supervisor or physician	At least 2 different assessors No more than 1 in a simulation setting	2

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
F3: Providing initial management for trauma patients	Direct observation by trauma team leader, fellow or senior resident with trauma experience	At least 1 primary survey At least 1 secondary survey	2
F4: Providing risk assessment and management for preoperative patients in preparation for surgery	Direct or indirect observation by supervisor	At least 2 different assessors At least one emergency procedure At least one elective procedure At least one high risk or critically ill patient	4
F5: Providing patient education and informed consent in preparation for surgical care	Direct observation by supervisor	At least 2 different assessors At least one emergency procedure At least one elective procedure At least 2 in clinical (non-sim) settings	3
F6A & B: Participating in surgical procedures	Part A Direct observation by supervisor Part B (MSF) Direct observation by members of the health care team	Part A At least 2 by attending/faculty surgeon At least 2 different types of procedures At least 2 different assessors Part B 3 different observers 2 different roles (at least 1 by a Nurse)	4 3
F7A & B: Managing patients with an uncomplicated post-operative course (Part A)	Part A Direct observation or case discussion by supervisor Part B (MSF) Direct observation by members of the health care team	Part A At least 2 high complexity patients At least 2 different assessors Part B 3 different observers 2 different roles	4 6
F8: Managing post-operative patients with complications	Direct observation or case discussion by supervisor **with review of documentation**	At least 4 different complications At least 3 different assessors	8

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
F9: Supervising junior learners in the clinical setting	Direct observation by supervisor or junior learners (medical students)	At least 2 different senior residents or faculty	3

* Unless otherwise specified, supervisor = attending surgeon, fellow or senior resident
* Gold shaded rows are high likelihood and/or high priority

General Surgery EPAs – Foundations of Discipline

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
F 1. Assessing and providing initial management plan for patients presenting with a simple General Surgery problem	Direct and indirect observation by surgeon, surgical fellow, Core or TTP resident	At least 2 different observers At least 3 observations by faculty At least 1 direct observation	5
F 2. Recognizing and initiating management for patients with a surgical abdomen/acute abdomen	Direct observation and/or case review by general surgeon, critical care physician, surgical subspecialty trainee, or Core or TTP resident	At least 2 observations by faculty	3
F 3. Performing fundamental skills in General Surgery	Direct observation by surgeon, surgical fellow, or Core or TTP resident	At least 2 laparotomy, including 1 opening and 1 closing At least 2 laparoscopy No more than 1 simulation per task At least 3 observations by faculty	6

* Unless otherwise specified, supervisor = attending surgeon, fellow or senior (Core or TTP) resident
* Gold shaded rows are high likelihood and/or high priority

General Surgery EPAs – Core of Discipline

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
C 1. Providing surgical consultation	Direct observation and/or case review by general surgeon, surgical subspecialist, subspecialty trainee, or TTP trainee	At least 2 different settings No more than 1 sim At least 5 complex At least 1 thyroid or parathyroid At least 3 different observers At least 5 observations by faculty	10
C2: Providing initial assessment and management of patients with multiple traumatic injuries	Direct observation and/or case review by a general surgeon, emergency physician, trauma team leader (TTL) or trauma fellow	At least 1 penetrating trauma, may be sim At least 1 unstable patient At least 3 direct observations At least 3 observations by faculty	5
C3: Leading the team providing care for an inpatient surgical service *priority for General Surgery acute care service criterion	Direct and indirect observation by supervisor	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	5
C5: Performing procedures on the stomach and duodenum	Direct observation by general surgeon or subspecialty trainee	At least 6 observations by faculty At least 2 of each surgical task At least 1 resection of stomach in a malignant case At least 2 different observers	12
C6: Performing procedures on the small bowel	Direct observation by general surgeon or subspecialty trainee	At least 6 observations by faculty At least 2 different observers At least 2 of each surgical task	12
C7: Performing procedures on the appendix and colon	Direct observation by general surgeon or subspecialty trainee	At least 9 observations by faculty At least 2 of each surgical task At least 1 left sided colon resection	18

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
		At least 1 emergent colon resection At least 2 different observers	
C9: Performing procedures on the hepatobiliary system	Direct observation by general surgeon or subspecialty trainee	At least 7 observations by faculty No more than 2 sim At least 2 different observers At least 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	13
C10: Performing procedures on the pancreas	Direct observation by general surgeon or subspecialty trainee	At least 1 observation by faculty	2
C11: Performing procedures on the spleen	Direct observation by general surgeon or subspecialty trainee	At least 1 emergent or sim-trauma setting No more than 1 in simulation setting At least 1 observation by faculty	2
C14: Performing procedures on the abdominal wall and hernia	Direct observation by general surgeon or subspecialty trainee	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	10

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
C15: Performing procedures on the skin and soft tissue	Direct observation by general surgeon, plastic surgeon or fellow	At least 1 soft tissue infection At least 1 of each surgical task/procedure At least 2 different observers At least 4 observations by faculty	8
C16: Performing procedures for patients with traumatic injuries	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	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	10
C17: Performing the skills of minimally invasive surgery (MIS)	Direct observation by general surgeon or subspecialty trainee	At least 1 of each surgical task At least 2 different observers At least 2 observations by faculty	4
C19: Performing esophagogastroduodenoscopy	Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee	At least 2 therapeutic procedures At least 2 different observers At least 5 observations by faculty	10
C20: Performing colonoscopies	Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee	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	10

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
C 22 (SA 2): Delivering scholarly teaching to a variety of audiences, including peers, junior trainees, and/or other health professionals	Direct observation by surgeon	None	2

* Gold shaded rows are high likelihood and/or high priority

General Surgery EPAs – Transition to Practice

EPA	Observation	Specific Criteria (Contextual Variables)	Number Req'd
P3: Managing the day's list of operative procedures	Direct observation by general surgeon or subspecialty trainee, incorporating feedback from anesthesiologist and operating room charge nurse or OR nurses	2 Different assessors 1 Faculty observation Mix of inpatients and outpatients	2
P4: Performing therapeutic endoscopic interventions of the upper and lower gastrointestinal tract (OPTIONAL)	Direct observation by general surgeon, subspecialty surgeon, gastroenterologist or subspecialty trainee	2 Different assessors 8 Faculty observations 2 Hemostasis in active bleeding 2 Dilations 2 Foreign body removal 5 Polypectomy > 1 cm 1 Endoluminal stent insertion 1 Colonic decompression	15
P5 (SA #1): Performing the administrative, human resource and financial aspects of independent practice	Review of portfolio of activities by supervisor	None	1

* Gold shaded rows are high likelihood and/or high priority