

**Sunnybrook Health Sciences Centre,
Division of General Surgery_
Goals and Objectives for General Surgery Trainees
SENIOR RESIDENT**

Senior General Surgery residents will complete a 2-month (PGY3) or 4-month (PGY4, 5) rotation on the service. The General Surgery service at Sunnybrook Health Sciences Centre offers a rich exposure to key areas of General Surgical care including learning opportunities in:

- Trauma
- Acute Care Surgery
- Colorectal Oncologic Surgery
- Hepatobiliary Oncologic Surgery

The goal of this rotation is to afford residents the opportunity to develop the knowledge and the skills necessary to assess and deliver surgical and peri-operative care to complex general surgery trauma and oncology patients. The rotation is conducted with a focus on evidence-based and multidisciplinary care, with goal-directed and individualized assessment and training for residents.

The following Goals and Objectives are detailed for General Surgery residents and organized by CanMeds roles.

These Goals and Objectives are utilized in evaluation of Resident performance and will be reflected on the ITER.

Medical Expert

At the end of the rotation the ALL senior residents will be able to:

Knowledge

1. Demonstrate an appropriate fund of knowledge of normal physiology and pathobiology of disease.
2. Demonstrate level specific degree of synthesis; integrates all relevant information into care plans
3. Use all of the pertinent information to arrive at complete and accurate clinical decisions; orders the appropriate investigations and develops an appropriate therapeutic plan that reflects current standards of practice for patients in the pre and post-operative settings
4. Recognize and manage emergency conditions (extremely ill patient) resulting in prompt and appropriate treatment; diagnostic tests and therapeutic interventions that are appropriate and consultative services are appropriately consulted. Remains calm, acts in a timely manner and prioritizes correctly
5. Recognizes the need to intervene in critically ill patients

Operating Room Skills

1. Demonstrate comfort with surgical anatomy, indications, contraindications and conduct of the operation
2. Recognize planes, conducts atraumatic dissection
3. Be efficient in time and motion
4. Know when slow down, recognize unexpected findings and respond appropriately.
5. Recognize limitations of personal skills and asks for help as needed.
6. Manage stresses of the operating room environment appropriately

INTERMEDIATE (PGY-3) RESIDENTS – Knowledge

1. Follow the principles of resuscitation of the major trauma patient
2. Accurately review trauma imaging (CXR, pelvic xray, CT chest, abdomen, pelvis)
3. Follow the principles of source control for surgical infection, including management of wound abscess
4. Conduct a trauma laparotomy
5. Demonstrate proficiency in the pre and post-operative care of patients undergoing elective and/or emergency surgery.

INTERMEDIATE (PGY-3) RESIDENTS - Technical Skills

1. Achieve hemorrhage control in the bleeding patient
2. Demonstrate proficiency with the technique of small bowel anastomosis
3. Conduct a laparotomy for small bowel obstruction including, opening and closing of the abdomen, lysis of adhesions, small bowel resection with primary (handsewn or stapled) anastomosis of small bowel with minimal or some assistance
4. Complete an uncomplicated inguinal hernia repair with minimal assistance.

SENIOR RESIDENTS (PGY- 4&5) – Knowledge

1. Develop a diagnostic and treatment plan for colorectal malignancy, including differential diagnoses, presenting symptoms, indications for screening, surgical treatment options for acute or elective presentations, role of lymphadenectomy, need for surgical margins, role of chemo and radiotherapy, neoadjuvant therapy, treatment of advanced and metastatic disease, as well as palliation
2. Conduct an appropriate workup and provide appropriate management of recurrent and advanced rectal cancer
3. Conduct an appropriate diagnostic workup and provide appropriate management of pancreatic, gastric, and hepatic tumours
4. Demonstrate the principles of damage control resuscitation and damage control surgery
5. Demonstrate proficiency in multi-disciplinary management of patients with colorectal, gastric and hepatobiliary malignancies.
6. Recognize the need for and appropriate timing of palliative surgical interventions.
7. Recognize complications of intestinal surgery (gastric, small bowel, large bowel, low rectal), such as anastomotic disruption, abscess, fistulae and post operative bleeding.
8. Implement appropriate interventions related to resuscitation, imaging, interventional drainage, management of pain and nutrition, need for, and timing of re-operation.
9. Recognize and develop appropriate management plans for complications such as myocardial infarction, deep venous thrombosis, pulmonary embolism, pneumonia, urinary tract infection and catheter related blood stream infection.
10. Identify the need for an end of life/palliative care discussion, arrange appropriately timed meetings with relevant parties and engage in discussion addressing the patients' and families' concerns.

SENIOR RESIDENTS (PGY- 4&5) – Technical Skills

1. Demonstrate proficiency in laparoscopic intracorporeal suturing
2. Demonstrate proficiency in completing a laparoscopic colon resection with assistance
3. Demonstrate proficiency in the operative management of uncomplicated and complex acute cholecystitis
4. Complete a cholecystectomy for acute cholecystitis, demonstrating principles of safety related to dissection of the triangle of Calot, attention to hemostasis, port placement, conversion to an open procedure if required, and indications for intra-operative cholangiogram.
5. Demonstrate proficiency in operative management of complicated and perforated appendicitis
6. Demonstrate proficiency in procedures required to achieve source control in surgical infections [e.g. peritonitis, necrotizing soft tissue infections, empyema]
7. Demonstrate the technique of total mesorectal excision
8. Demonstrate component techniques involved in a Whipple, liver resection, and total gastrectomy with assistance including:
 - Dissection of the porta hepatis

- Vascular isolation/control for vein resection/ligation in hepatic/pancreatic resection
 - Perigastric and periportal lymphadenectomy
 - Parenchymal transection for liver resection
9. Safely perform a laparotomy for trauma demonstrating the achievement of hemostasis by packing for hemorrhage.
 10. Perform a laparotomy for peritonitis and achieve source control through operative techniques, with minimal or some assistance.
 11. Safely complete an uncomplicated right hemicolectomy, left hemicolectomy, and/or sigmoid resection with minimal or some assistance.

Communicator

At the end of the rotation the resident will be able to:

1. Provide timely, accurate, compassionate and patient-centered information exchange, with patients and their families, at the point of care.
2. Ensure that documentation includes appropriate information related to unexpected events and complications.
3. Demonstrate proficiency in obtaining informed consent for emergency and elective surgery, providing appropriate information on common and severe complications.

Collaborator

At the end of the rotation the resident will be able to:

1. Complete the surgical checklist with the peri-operative team.
2. Communicate with consultant services and collaborate effectively with consulting services and allied professionals to ensure best care delivery.
3. Complete the electronic handover tool after their on-call period.
4. Consult relevant services and incorporate relevant therapeutic plans into the overall plan of care for the patient.
5. Communicate effectively with the ICU team to coordinate ICU and surgical care of patients.
6. Demonstrate proficiency in handover with the team on call and the responsible attending surgeon for any patient with active issues prior to leaving the hospital (e.g. pending investigations, required clinical reassessment, pending surgical intervention, or recent transfer to the ICU).
7. Collaborate with medical and radiation oncology for appropriate multi-disciplinary care of the cancer patient.
8. Interact effectively at multidisciplinary rounds.
9. Manage interpersonal conflict effectively

Leader/Manager

At the end of the rotation the resident will be able to:

1. Ensure timely discharge of patients.
2. Demonstrate proficiency in time management by appropriately signing over patients to the on call team and ensuring safe and appropriate delegation of tasks to team members.
3. Effectively lead and contribute to the health care team
4. Delegate and distribute tasks fairly
5. Use time wisely.
6. Participate in quality process evaluation and improvement (including morbidity and mortality conferences), such as patient safety initiatives.
7. Reflect critically on practice limitations and promote strategies for systematic improvement

Health Advocate

At the end of the rotation the resident will be able to:

1. Ensure diagnostic tests are completed in a timely fashion.
2. Organize resources to ensure that patients can be safely discharged from hospital in a timely fashion.
3. Engage in patient safety initiatives and identify opportunities for quality improvement in surgical care delivery.
4. Provides support and information on health maintenance, lifestyle, community/home resources
5. Make appropriate referrals for adjuvant and neoadjuvant treatments in the setting of cancer

Scholar

At the end of the rotation the resident will be able to:

1. Demonstrate a curiosity and interest in the field.
2. Read around cases to expand their scope of knowledge.
3. Present and discuss relevant topics at teaching rounds, including morbidity and mortality reviews and journal clubs.
4. Demonstrate proficiency in the teaching of undergraduate students and junior trainees.
5. Demonstrate the ability to meet the diverse learning needs of house staff and other health professionals at various levels and from various disciplines.

Professional

At the end of the rotation the resident will be able to:

1. Complete medical records: OR dictations, discharge summaries, consult notes, death certificates in a timely manner.
2. Respect the PARO contract.
3. Provide patient care in a compassionate and ethical manner, reflecting an understanding of issues related to age, gender, culture and ethnicity.
4. Demonstrate respect for colleagues, more junior trainees and other members of the health care team.
5. Maintain an acceptable attendance record at teaching rounds.
6. Demonstrate insight into strengths and weaknesses and receive feedback appropriately.
7. Disclose an adverse event or medical error in appropriate circumstances
8. Demonstrates respect for medical code of conduct and ethical behaviour