Colorectal Surgery Residency Program

Educational Objectives - **Mount Sinai Hospital Orange Team**

University of Toronto

2020

The primary goal of the University of Toronto Colorectal Surgery Program is to produce colorectal surgeons who are dedicated to the pursuit of an academic surgical career.

The clinical year will include a 2-4 four month rotation at the Mount Sinai Hospital on Orange Team, working with Drs. MacRae, and Gryfe. In this rotation, there is a concentration on major abdominal surgery, especially in the areas of inflammatory bowel disease, oncology, especially as it relates to familial GI cancers, laparoscopic surgery, and colonoscopy. The resident participates in the pre-operative and postoperative care of patients as well as attending weekly IBD rounds, multi-disciplinary cancer conferences, ambulatory clinics and performing endoscopy.

Evaluations will include a mid-rotation evaluation, communication (written and CANMeds communicator check list), performance-based assessment on operative skills and an oral examination. 360 degree evaluations will also be completed on the resident by the OR nurses, as well as by nurses and other health care professionals on the floor. Finally, an In-training evaluation at the end of the rotation on each resident will be completed.

While this rotation focuses on the CanMEDS Medical Expert, Communicator and Professional, it is expected that the trainee will demonstrate proficiency in all spheres.

EDUCATIONAL OBJECTIVES – Mount Sinai Hospital, Orange Team Rotations

1. MEDICAL EXPERT

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient centered medical care
2. Apply comprehensive knowledge of anatomy, physiology, pathology, pathophysiology, etiology and radiology and complications of the disease entities listed in Appendix 1.
3. Perform a complete and appropriate assessment of a patient
4. Elicit a history that is relevant, concise and accurate to context and preferences for the purposes of prevention and health promotion, diagnosis and/or management
5. Perform a focused physical examination that is relevant and accurate
6. Arrive at an appropriate differential diagnosis
7. Select appropriate investigative methods in a resource-effective and ethical manner
8. Demonstrate effective clinical problem solving and judgment to address patient problems, including interpreting available data and integrating information to generate differential diagnoses and management plans, including critically ill patients
9. Implement a management plan in collaboration with the patient and their family
10. Demonstrate appropriate and timely application of preventive and therapeutic interventions relevant to colorectal surgery
11. Manage patients in the ambulatory setting, demonstrating knowledge of common office techniques and procedures
12. Manage the patient throughout the entire in hospital course, demonstrating knowledge of and being able to treat potential complications of the disease

processes and operative procedures and their treatment.
13. Demonstrate the ability to obtain appropriate informed consent
14. Proficiently use appropriate procedural skills, both diagnostic and therapeutic
15. Order appropriate laboratory, radiologic and other diagnostic procedures and demonstrate knowledge in the interpretation of investigations
16. Safely and effectively perform therapeutic procedures relevant to colorectal surgery listed in Appendix 2.
17. Proficiently use endoscopic skills.

2. COMMUNICATOR

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Develop rapport, trust and ethical therapeutic relationships with patients and families
    a. respect patient confidentiality, privacy, autonomy and cultural diversity
    b. listen carefully and show empathy
    c. be aware and responsive to nonverbal cues
    d. use appropriate language to ensure patient understanding
2. Discuss therapeutic risk/benefit information with ulcerative colitis patients and their families and obtain informed consent for procedures, including subtotal colectomy with ileostomy and pelvic pouches.
3. Demonstrate a common understanding on issues, problems and plans with IBD patients, families, and other professionals to develop a shared plan of care
4. Convey effective oral and written information to other physicians and health care providers about medical encounters, particularly in the form operative notes, consultation letters and discharge summaries.
5. Deliver bad news in a compassionate and sensitive manner that takes into account the patient's special psychological and social needs
6. Demonstrates the ability to develop a comprehensive or complex plan for the patient that incorporates the input of the patient.

3. COLLABORATOR

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Participate effectively and appropriately in an interprofessional healthcare team when caring for complex inpatients.
2. Participate in multidisciplinary team meetings
3. Lead joint rounds with other surgeons, pathologists, radiologists and gastroenterologists
4. Demonstrate a respectful attitude towards other medical and surgical colleagues

4. LEADER

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Participate in quality process evaluation and improvement, such as patient safety initiatives in the operating room and on the ward
2. Run the inpatient service effectively, managing the team responsibilities to best meet all learner objectives and effective patient care.
3. Carry out appropriate clinical services in the context of limited resources, limited

expected lengths of stay, and limited time available for the resident

5. HEALTH ADVOCATE

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Discuss smoking cessation with IBD patients and the effect of smoking on their disease status.
2. Identify and refer patients to advocacy and supportive organizations for IBD care and familial GI cancers

6. SCHOLAR

At the completion of their rotation, colorectal residents will demonstrate the ability to:

1. Critically appraise the colorectal literature around familial GI cancers, and apply the findings to practice situations
2. Facilitate the learning of patients, families, students, residents and other health professionals on the colorectal team.
3. Discuss the literature on pelvic pouch surgery, and its outcomes.

7. PROFESSIONAL

By the end of the rotation, the colorectal residents will demonstrate the ability to:

1. Exhibit professional behaviours, including honesty, integrity, commitment, compassion, respect and altruism
2. Recognize and respond appropriately to ethical issues in practice
3. Apply the principles of patient confidentiality
4. Maintain appropriate relationships with patients, including appropriate draping for a physical examination and appropriate presentation of a case to a group in the presence of the patient.
5. Demonstrate knowledge of the medical, legal, and professional obligations of the specialist
6. Demonstrate insight into own limitations. Responsive to constructive feedback.
7. Maintain and complete a procedural case log that accurately reflects the resident's surgical experience

Appendix 1 – Diseases Entities

Abdominal disorders

1. Infectious diseases
   a. pseudomembranous colitis – Clostridium difficile
   b. soft tissue infections
2. Diverticular disease and its complications
3. Mucosal ulcerative colitis
   a. Proctosigmoiditis
   b. acute complications
   c. chronic complications

4. Crohn's Disease
    a. Small bowel
    b. large bowel
    c. anal
5. Vascular Disease
    a. occlusive disease
    b. areterial
    c. venous
    d. ischemic colitis
6. Neoplastic Disease
    a. polyposis syndromes
    b. Benign tumours
        i. lymphoid hyperplasiA
        ii. lipoma
        iii. leiomyoma
        iv. lymphangioma
        v. abdominal desmoids tumours
    c. Malignant tumours
        i. Carcinoid
        ii. GIST
        iii. Lymphoma
        iv. HNPCC
7. Obstruction
    a. mechanical – stricture, abscess, extrinsic, post radiation
    b. paralytic
    c. pseudo-obstruction
8. Fistulas
    a. small bowel
    b. large bowel

Anorectal Disorders

1. Crohn's perianal disease
2. Anal/rectal fistulas
3. Rectal Strictures
4. Anastomotic strictures
5. Necrotizing infections of the perineum: gas forming cellulitis, Fournier's gangrene

Appendix 2 – Procedures

1. Anorectal procedures
    a. Incision and drainage of abscess
    b. Anal fistulotomy +/- seton placement
2. Operative procedures (laparoscopic and open)
    a. Right hemicolectomy or ileocecectomy with anastomosis
    b. Stricturoplasty
    c. Proctocolectomy with ileostomy
    d. Proctocolectomy with ileoanal anastomoses, pelvic pouch procedures
    e. Colectomy with ileorectal anastomosis
    f. Subtotal colectomy with ileostomy
    g. Anterior proctosigmoidectomy with colorectal anastomosis

h. Hartmann procedure
i. Takedown of Harmann colostomy
j. Closure ileostomy and colostomy
k. Loop ileostomy and colostomy