RESIDENCY PROGRAM IN GENERAL SURGERY

Hines VA Hospital — General Surgery

RESIDENT COMPLEMENT: PG1, PG3 & PG5

ROTATION DURATION:
4 PG1 - 1 months
1 PG3 - 2 months
1 PG5 – 10.5 weeks

GOALS (General Competencies - ACGME):

1. **Patient Care** that is compassionate, appropriate, and effective for the treatment of health programs and the promotion of health.

2. **Medical Knowledge** about established and evolving biomedical, clinical, and cognate sciences, as well as the application of this knowledge to patient care.

3. **Practice-based learning and improvement** that involves the investigation of care for their patients, the appraisal and assimilation of scientific evidence, and improvements in patient care.

4. **Interpersonal and communication skills** that result in the effective exchange of information and collaboration with patients, their families, and other health professionals.

5. **Professionalism**, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to patients of diverse backgrounds.

6. **Systems-based practice**, as manifested by actions that demonstrate an awareness of and responsiveness to the larger context and system of health care, as well as the ability to call effectively on other resources in the system to provide optimal health care.

ROTATION-SPECIFIC GOALS:

**GOAL #1: Patient Care**

**PGY 1**

- Perform and record complete histories and physical exams for routine surgical conditions
  - Hernia
  - Skin Lesions
  - Soft Tissue Mass
  - Bowel Obstruction
  - Abdominal Pain/Biliary Colic/RLQ Abdominal Pain
  - GI Bleeding
- Construct thorough differential diagnosis lists for these conditions
• Select appropriate diagnostic studies to begin working through differentials
• Interpret diagnostic laboratory studies
• Interpret basic imaging studies: chest and abdominal plain films
• Interpret advanced imaging studies with assistance
• Perform nutritional assessments of surgical patients
• Perform basic surgical procedures with appropriate assistance
  o Place nasogastric tube/Replace long standing jejunostomy and gastrostomy tubes
  o Skin excisions
  o Incision and drainage of cutaneous abscess
  o Orotracheal intubation
  o Thoracostomy
  o Central venous catheter
  o Perform Basic Endoscopy: Anoscopy, Proctoscopy
  o Demonstrate proficiency in suturing and knot tying
• Assist with more complicated operations
  o Assist with/Perform with assistance upper endoscopy, bronchoscopy
  o Assist with repair of abdominal wall hernia
  o Assist with abdominal incision closure
  o Assist with abdominal operations
• Record operative observations and write operative reports
• Read, interpret and take responsibility for checking pathology reports
• Manage postop wounds, intestinal tubes, drains and stoma appliances
• Provide follow-up care to patients in outpatient clinic or office

**PGY 3**
• The PGY 3 resident will be proficient in all PGY 1 patient care objectives
• Primary Clinical Goals
  o Become Proficient at Developing Reasonable Clinical Care Plans at all Points of Care
  o Able to provide assistance for complex cases in the OR
  o Able to perform simple procedures independently
    ▪ Skin excisions.
    ▪ Umbilical hernia repair
    ▪ Diagnostic laparoscopy
    ▪ Fascial Closures
• Participate in departmental meetings
  o Prepare for and Run the Tuesday Preoperative Case Conference
  o Participate in teaching/clinical guidance of PGY 3 in Tuesday morning case conference
• Prepare evaluations of junior residents and students

**PGY 5**
• The PGY 5 resident will be proficient in all PGY 1 and PGY 3 patient care objectives
• The primary goal is to approach independence in all aspects of decision making.
• Select, obtain and interpret appropriate pre-treatment/staging diagnostic studies
• Be able to stage common neoplasms clinically using the TNM system
  • Breast Cancer
- Colon Cancer
- Gastric Cancer
- Small Intestinal Cancer
- Pancreatic Cancer
- Neuroendocrine Tumors of the Pancreas, Stomach and Small Bowel

- Consider appropriate non-operative/neoadjuvant therapeutics prior to surgical interventions
- Develop an appropriate operative plan
- Make recommendations to services requesting consultations
- Manage psychosocial aspects of neoplastic disease.
- Prepare patients medically for an operation as appropriate given the urgency of the case:
  - optimize nutrition
  - pursue appropriate risk stratification
  - correct metabolic deficits
- Assess need and institute appropriate monitoring both pre-, intra- and post-operatively
- Perform medium complexity operations independently
  - Open Inguinal and Ventral Hernia Repair
  - Enterolysis
  - Partial Gastrectomy
  - Right Hemicolecotomy
  - Small Bowel Resection
  - Hartmann’s Procedure
- Understand the steps/approaches in and perform complex procedures with appropriate assistance
  - Pancreaticoduodenectomy
  - Distal Pancreatectomy
  - Partial hepatectomy and hepatic lobectomy
  - Paraesophageal Hernia Repair
  - Nissen Fundoplication
  - Left Colectomy (laparoscopic and open)
  - Low Anterior Resection
  - Total Gastrectomy
  - Thyroidectomy
  - Parathyroidectomy
  - Adrenalectomy
  - Retroperitoneal Sarcoma
  - Extremity Soft Tissue Sarcoma
- Assist and supervise junior residents in diagnosis, surgical management, and follow-up care of patients with common, low to medium complexity digestive surgical diseases
- Identify and Manage Postoperative Complications
  - Wound Complications (Infections, Dehiscence, Evisceration)
  - Intraabdominal Sepsis (Pancreaticobiliary and Intestinal Fistula)
  - Cardiopulmonary Complications (PE, Pneumonia, MI)
- Direct appropriate utilization of social agencies in complex patient management
- Participate in departmental meetings
  - Prepare M and M Case Presentations
Participate in teaching/clinical guidance of PGY 3 in Tuesday morning case conference

- Prepare evaluations of junior residents and students

Achievement of patient care learning objectives will be assessed by:

- Direct observation of the resident performance in the clinics, on ward rounds, in multidisciplinary conferences (for patient care presentations) and in the operating room.
- Service Chief and faculty surgeons will provide summary (global) evaluations of clinical performance at the end of the rotation
- A 360-degree evaluation (students, faculty, nurses, other health care providers and workers) from key service locations within the health system

**GOAL #2: Medical Knowledge**

**PGY 1**

- Describe pathophysiology of referred pain, rebound tenderness, guarding, rigidity (e.g., ruptured appendicitis, diverticulitis, gastric or duodenal ulcer perforation)
- Specify characteristics of the history, physical examination findings for visceral and somatic pain and the mechanism of progression from visceral to somatic pain for: appendicitis, bowel obstruction, perforated ulcer, diffuse peritonitis
- Understand relevant anatomy and surgical repair of primary abdominal wall hernias
- Understand anatomy, embryology, biochemistry and physiology of GI tract, enterohepatic circulation, nutritional needs of surgical patients, and bacterial flora in the upper/lower GI tract
- Define mechanisms of alimentary tract diseases:
  - Acid Reflux
  - Esophageal Dysmotility
  - Gastric and Duodenal Ulcer
  - Small Bowel Obstruction vs. Paralytic Ileus
  - Inflammatory Bowel Disease
  - Biliary Colic
  - Cholecystitis
  - Cholangitis
  - Pancreatitis
  - Appendicitis
  - Large Bowel Obstruction
- Outline pathophysiology, evaluation, and management of these disorders

**PGY 3**

- The PGY 3 resident will be proficient in all PGY 1 knowledge objectives
- Understand pathophysiology and management for GI Surgical Complications
  - Intra-abdominal abscess vs. leak
  - Controlled Fistula vs Uncontrolled Fistula
  - Postoperative bowel obstruction
  - Postoperative intestinal ischemia
  - Postoperative Liver Failure
- Understand concepts of advanced disease
  - Advanced pathologic Stage
- Poor physiologic reserve/Frailty
- Compromised Nutrition
- Summarize nutritional requirements for cancer patients
- Describe indications for curative vs. palliative treatment
- Broadened knowledge of treatment modalities for surgically treated malignancy
  - Familiarity with atypical skin malignancy like Merkel cell cancer
    - Role Sentinel Node Biopsy
    - Role of XRT
  - Dermatofibrosarcoma protuberans
  - Intrahepatic cholangiocarcinoma
  - Extrahepatic cholangiocarcinoma
    - Role of XRT
    - Role of Transplant
  - Hepatocellular Cancer
    - Role of Y-90
    - Role of Transplant

**PGY 5**
- The PGY 5 resident will be proficient in all PGY 1 and PGY 3 knowledge objectives
- Summarize potential limitations and role of remedial surgery after repeated treatment failure for:
  - Peptic ulcer disease
  - Bleeding esophageal varices
  - Upper & lower GI bleeding with uncertain source
  - Gastroparesis
  - Inflammatory bowel disease
  - Diverticulitis
- Explain the physiologic/therapeutic rationale for revisional surgery for:
  - Incomplete vagotomy
  - Repeat gastric resection for recurrent ulcer disease
  - Ostomy complications (Revision vs. Repair for Parastomal Hernia)
  - Bypass of GI tract segments for unresectable tumors
  - Drainage of pancreatic cysts (internal vs. external)
  - Drainage of recurrent abdominal/retroperitoneal abscesses (percutaneous and operative)
- Assess alternatives to surgical intervention in managing complex alimentary tract diseases
  - Short gut syndrome
  - Achalasia
  - Barrett’s esophagus
  - Intestinal polyposis,
  - Inflammatory bowel disease
- Summarize preoperative, operative, and post-operative management of surgical complications:
  - Re-operative abdomen
  - High output GI fistulas
  - Recurrent colon cancer and carcinomatosis
• Discuss morbidity and alternatives to surgery for common operations in high risk patients:
  o Cholecystectomy
  o Common Bile Duct Stones
  o Appendectomy
  o Bowel Obstruction
• Describe indications for operative and non-operative management of necrotizing pancreatitis
• Describe the etiology, pathophysiology, and management of complicated chronic pancreatitis
• Discuss diagnosis, evaluation, and surgical management of complex pancreatic neoplasms
  o Cystic Neoplasm and IPMN
  o Islet Cell Tumors
  o Resectable, Borderline Resectable and Unresectable Pancreatic Cancer
• Discuss the surgical management of patients with multiple abdominal pathologies
  o Synchronous GI Malignancy and Aortic Aneurysm
  o Synchronous GI Malignancies
• Describe etiology, manifestations, and treatment options for low grade/benign tumors:
  o Desmoid
  o Rectus Sheath hematoma
  o Retroperitoneal fibrosis

Medical and surgical knowledge will be assessed by:

• Daily queries on Rounds, in teaching conferences and in the Operating Room
• American Board of Surgery In-Training Examination (ABSITE)
• Mock Oral Exams PGY 3 and PGY 5

GOAL #3: Practice-based Learning & Improvement — PGY 1-5

• Use IT to perform on-line searches to support self-directed learning
• Critically review scientific evidence appropriate to the care of assigned patients
• Include evidence based references in M&M presentations and on rounds
• Discuss at least one pertinent publication per week for an operation performed by the resident

Practice based learning will be assessed and measured by:

• M and M presentations will be evaluated for use of literature based evidence
• Resident use of literature will be assessed daily in interactions in clinics, wards and OR.
• Feedback will be provided immediately and during semi-annual feedback sessions.

GOAL #4 Interpersonal & Communication Skills — PGY 1-5

• Discuss planned procedure with patient describing potential complications
• Concise presentations of patients on teaching rounds and during patient care review conferences
• Assist students to prepare for patient presentations on rounds
• Present surgical complications at M&M (PG5)
• Serve as effective surgical team leader (PG5)
Communication skills will be assessed and measured by:

- Direct observation of case discussions on rounds or in clinic
- Direct observation of patient presentations during patient care review, rounds and conferences
- Evaluations by students on the service will be obtained regarding resident ability to teach

**GOAL #5 Professionalism — PGY 1-5**

- Administer patient care conscientiously with highest standards of professional, ethical and moral conduct in all circumstances.
- Work with students, peers, superiors, nurses, health care professionals and other hospital staff colleagues in a courteous and thoughtful manner

Professionalism will be assessed and measured by:

- Direct observation by attending surgeons of postoperative or post procedural care plans and instructions as outlined by the resident with the patient and/or family members (at least one discussion per PGY1 and PGY5 resident will be evaluated and feedback provided immediately. This exercise will occur weekly during the rotation for each resident.
- A 360-degree evaluation system (students, peers, faculty, nurses, other health care providers) will be used to evaluate residents’ performances in all geographic locations and throughout the day and night.

**GOAL #6 Systems-based Practice — PGY 1-5**

- Understand the impact of surgical disease on an individual patient and family
- Understand that the care of the patient impacts the broader health care system
- Understand the role of the physician as the principle steward of the health care system
- Identify patients that have multidisciplinary needs early in a given care episode
- Coordinate multidisciplinary teams:
  - Cardiology
  - Pulmonology
  - Medical Oncology
  - SICU
  - Interventional Radiology
  - Interventional Gastroenterology
  - Hospice

Systems Based Practice will be assessed and measured by:

- A report of experience either in outpatient clinic, during a multidisciplinary planning conference, hospice or support group planning session that specifically addresses the role of surgeons
- A 360-degree evaluation (students, peers, faculty, nurses, other health care providers) will be used to evaluate residents’ performances across the local health care system.
RECOMMENDED READING:

REQUIRED CONFERENCES and ROUNDS:
A. Mortality and Morbidity
B. Residents’Conference
C. Grand Rounds
D. Tuesday rounds with Dr Aranha
E. Tuesday afternoon Multidisciplinary Tumor Board
F. Saturday and Sunday rounds with on-call attending surgeon

WEEKLY CLINICAL SCHEDULE:
Monday: VA M and M 7AM to 8AM Third Monday of the Month
        Main VA Operating Room 730 AM to 330 PM
        Loyola M and M 5PM to 6PM
Tuesday: Preoperative Workup/Teaching Conference 815 to 930
        Clinic 1030 AM to 4 PM
        Multidisciplinary Tumor Board (GI alternating with Liver Tumor) 4PM to 5 PM
Wednesday: Loyola Grand Rounds 7AM to 8AM
          Resident Teaching Conferences Loyola 8AM to 11 AM
          Minor Surgery Cases 1130 AM to 330 PM
Thursday: Main VA Operating Room 730 to 330 PM
Friday: Hepatopancreaticobiliary Teaching Conference 8 to 930 AM
        Main VA Operating Room 730AM to 12 PM
TARGET NUMBER OF OPERATIONS:

Residents are expected to experience the following surgical procedures/operations. Minimum number of cases is indicated by PGY Level. PGY 1 residents are expected to assist/observe 3-5 cases prior to meeting these minimum requirements.

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<thead>
<tr>
<th>Procedure</th>
<th>PGY1</th>
<th>PGY3</th>
<th>PGY5</th>
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<tbody>
<tr>
<td>Skin and soft tissue</td>
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<tr>
<td>Esophagus</td>
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<td>Stomach</td>
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<td>Hernia</td>
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<td>Abscess Drainage</td>
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FACULTY:

Fred Luchette, MD
Geoffrey Silver, MD
Arthur Sanford, MD
Vinod Winston, MD
Adam Kabaker, MD
Harold Bach, MD
Hadi Shaaban, MD
Marshall Baker, MD, MBA