General Surgery
Competency Based Curriculum
Goals and Objectives

MEDICAL/SURGICAL KNOWLEDGE:

Resident will gain knowledge of diagnosis, management, treatment, treatment options (surgical/non-surgical), long term prognosis, post-operative effects, complications, patient risk and cost considerations of various conditions.

Knowledge expectations are on a continuum from the first through the fifth year.
1. Body as a whole (core of basic surgical knowledge)
   • Wound healing
   • Hemostasis and bleeding diathesis
   • Tumor kinetics (biology of tumor growth, therapeutic regimens to include chemotherapy, radiotherapy, immunotherapy, surgery).
   • Surgical infections and their management with use of antibiotics, ancillary modes and surgical intervention.
   • GI physiology as it relates to surgical diseases.
   • GU physiology - assessment of renal function and renal physiology.
   • Surgical endocrinology as it applies to the response to stress and injury, and the management of endocrinopathy as it involves surgical patients.
   • Surgical nutrition
   • Applied surgical anatomy - familiarity with regional anatomy including thoraco-abdominal, head and neck, pelvis and extremities.

2. Diseases of the alimentary tract
3. Diseases of the abdomen
4. Diseases of the breast
5. Diseases of the head and neck
6. Diseases of the vascular system
7. Diseases of the endocrine system
PATIENT CARE AND TECHNICAL SKILLS:

R1: Can expect to learn the listed skills and assume responsibility for managing patients with these problems under close supervision of resident and attending staff.

- Refinement of history and physical skills.
- Resuscitative maneuvers (IV placement, chest tubes, central line placement, endotracheal intubation and control of hemorrhage, and interpretation of emergent CT).
- Pre and post-operative care
- Basic use of surgical instruments

The following operative procedures:
  - Minor outpatient surgical procedures
  - Inguinal herniorrhaphy
  - Breast biopsy
  - Appendectomy

R2: Will assume greater responsibility and technical skills involved in:

- Initial evaluation of surgical problems
- Consultation on emergency and in-hospital patients.
- Teaching students and interns
- Management decisions

The following procedures:
  - Cholecystectomy
  - Exploratory laparotomies
  - Small bowel anastomosis
  - Sentinel node biopsy, mastectomy

R4: Will assume greater responsibility and advanced technical skills with regard to:

- Teaching of medical students and junior residents.
- Organization of conferences
- Daily patient management decisions
- Direct resuscitative efforts in trauma and critically ill surgical patients.

The following procedures:
  - Common duct exploration
  - Thyroid surgery, parathyroid, and adrenal surgery (endocrine).
  - Mastectomies
  - Colon surgery
  - Flexible endoscopy (EGD, colonoscopy, choledochoscopy).
**R5** will assume primary responsibility for complex technical skills required for the management of:

- Complex surgical problems involving all areas of the body
- Daily patient care
- Clinic:
  - least one half day per week
  - Admit patients if required and provide in-hospital management
  - Follow patients' surgical problems and post-operative patients
- Organization of teaching conferences and rounds
- Assigning resident staff work-ups and operative responsibilities

The following procedures to include:
- Esophageal and gastric procedures
- Pancreatic operations
- Peripheral-vascular operations
- Radical head and neck operations
- Major liver resection
- Major cancer procedures

**INTERPERSONAL AND COMMUNICATION SKILLS**

**R1 and 2** residents will develop and refine their individual style when communicating with patients:

- They will strive to create ethically sounds relationships with patients, the physician team and supporting hospital personnel. They will create effective written communications through accurate, complete, and legible notes.

- They will exhibit listening skills appropriate to patient-centered interviewing and communication. Residents will recognize verbal and nonverbal cues from patients.

- Residents will be able to communicate with patients concerning end-of-life decisions.

**R4 and 5** residents will also exhibit team leadership skills through effective communication as manager of a team.

- R4 and 5 residents are expected to assist junior peers, medical students, and other hospital personnel to form professional relationships with support staff. Residents will respond to feedback in an appropriate manner and make necessary behavioral changes. Residents should additionally be able to successfully negotiate nearly all “difficult” patient encounters with minimal direction.
• R4 and 5 residents should function as team leaders with decreasing reliance upon attending physicians.

PROFESSIONALISM
• All residents will demonstrate integrity, accountability, respect, compassion, patient advocacy, and dedication to patient care that supercedes self-interest. Residents will demonstrate a commitment to excellence and continuous professional development. They will be punctual and prepared for teaching sessions.

• Residents will demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentially of patient information, and informed consent.

• Residents are expected to show sensitivity and responsiveness to patients’ culture, age, gender, and disabilities.

PRACTICE BASED LEARNING AND IMPROVEMENT
R1 and 2 residents will use hospital and university library resources to critically appraise medical literature and apply evidence to patient care.

• They will use paper and electronic references to support patient care and self-education.

• They will model these behaviors to assist medical students in their own acquisition of knowledge through technology.

R4 and 5 residents will in addition consistently seek out and analyze data on practice experience, identify areas for improvement in knowledge or patient care performance and make appropriate adjustments.

• They will regularly demonstrate knowledge of the impact of study design on validity or applicability to individual practice.

• R5 residents will additionally model independent learning and development and assist with the learning and development of the junior residents.
SYSTEMS BASED PRACTICE

**R1** residents will be sensitive to health care costs while striving to provide quality care. They will begin to effectively coordinate care with other health care professionals as required for patient needs.

**R2** residents, in addition to the above, will consistently understand and adopt available clinical practice guidelines and recognize the limitations of these guidelines. They will work with patient care managers, discharge coordinators and social workers to coordinate and improve patient care and outcomes.

**R4 and 5** residents, in addition, will enlist social and other out-of-hospital resources to assist patients with therapeutic plans. R4 and 5 residents are also expected to model cost-effective therapy.