



Surgery Curriculum

NGMC- Family Medicine Residency Program
Gainesville, Ga

PGY: 2

Description of Rotation:

This is a four-week block Surgical experience with direct supervision by general surgeons, trauma surgeons, orthopedic/sports medicine surgeons. Supplemental longitudinal learning in the FMP supervised by Family Physician Faculty is also expected. Residents will see surgical procedures commonly performed by surgeons and family physicians. The resident will acquire fundamental knowledge and technical proficiency principles of surgical management of disease and gain competence in recognizing diagnosing, and appropriately referring patients with surgical problems.

Overall Goals of Surgery Rotation:

Residents will achieve the following goals:

- Residents should develop the ability to build a list of differential diagnoses on patients with surgical conditions.
- Residents should be able to initiate appropriate treatment on patients with surgical problems.
- Manage preoperative evaluation of patients needing surgery, including initial resuscitation, evaluation and stabilization of acute emergencies and referral for major surgery.
- Assist in the management of post-operative care including medical and surgical complications for patients who have undergone surgery.
- Residents should gain a better understanding of the role of the primary care physician in the care of patients with surgical conditions.
- Residents should gain a better understanding of the appropriate role of surgical subspecialists in the care of patients with surgical problems.
- Residents will receive exposure to various aspects of surgical care of patients in a variety of different settings.

Patient Care Objectives and Competencies

Objectives:

- Resident shall observe/perform the following skills including but not limited to: (PC-1, PC-2)
 - Incision of drainage of a lesion
 - Tissue biopsy
 - Fine needle aspiration
 - Excision of superficial skin lesions and cysts
 - Removal of a superficial foreign body Paracentesis
 - Thoracentesis
 - Central venous catheterization
 - Chest tube placement
 - Treatment of first degree, second degree and minor third-degree burns.
 - Minor debridement of wounds



- Proper suture technique including:
 - Interrupted stitches
 - Running stitch
 - Simple closure
 - Multiple layer closure
- Residents shall develop skills that allow for up to date, compassionate care of patients with surgical problems while integrating evidence-based medicine, local standards of care, nationally defined quality care markers and specialty recommendations upon consultation (PC-2, PC-3, PC-4)
- Residents shall perform pre-operative risk assessments on patients prior to surgery (PC-1)
- Resident will assess and assist patients who may need surgery, including but not limited to the evaluation of: (PC-1, PC-4)
 - Abdominal pain
 - Varicose veins
 - Gastrointestinal disturbances
 - Orthopedic disorders
 - Breast lumps
 - Anorectal disorders
 - Hernias
 - Traumas
 - Sports-related surgical needs

Medical Knowledge Objectives and Competencies

Objectives:

- Develop basic knowledge of the following topics relevant to the care of surgical patients: (MK-1, MK-2)
 - Normal anatomy and physiology.
 - The pathophysiologic basis of common surgical problems.
 - History and physical assessment relative to surgical intervention.
 - Indications for and contraindications to various common surgical procedures.
 - Ethical consideration relative to surgical intervention (quality and quantity of life, alleviation of pain, informed consent, etc.)
 - Principles of sterile technique and use of basic surgical instruments.
 - Wound physiology and the healing process
- Develop and apply the following knowledge and skills to provide appropriate pre-operative care to surgical patients: (MK-1, MK-2)
 - Understand diagnostic features that indicate the need for surgery



- Understand appropriate laboratory and radiologic modalities that can be used to determine need for surgery
- Assessment of pre-operative risk.
- Understanding of medical conditions that can impact surgical risk (e.g. diabetes, heart disease, blood dyscrasias, etc.)
- Fluid and electrolyte balance.
- Anticipated blood requirements for surgery
- Bowel preparation for surgery
- Nutritional status and requirements
- Develop and apply the following knowledge to the post-operative care of surgical patients: (MK-1, MK-2)
 - Normal Post-Operative Care
 - Electrolyte, acid/base and fluid balance
 - Appropriate use of antibiotics
 - Appropriate use of analgesics
 - Wound care
 - Nutritional requirements
 - Physical activity
 - Bowel function
 - Kidney function
 - Management of suction and drains
 - Post-Operative Complications (MK-1, MK-2)
 - Behavioral abnormalities
 - Fever
 - Pneumonia
 - Atelectasis
 - Deep venous thrombosis & pulmonary embolism
 - Wound dehiscence and infection
 - Ileus
 - Transfusion reaction
 - Hemorrhage and shock
 - Thrombophlebitis
 - Nutritional compromise
 - Urinary retention and oliguria
 - Urinary tract infection



Topics to cover in rotation:

MK Topic	On-Line Resource
Acute Abdominal Pain	https://www.aafp.org/afp/2008/0401/p971.pdf
Acute Abdominal Pain in older adults	https://www.aafp.org/afp/2006/1101/p1537.html
Abdominal Aortic Aneurysm	https://www.aafp.org/afp/2008/0401/p971.pdf
Acute Abdominal Pain in Children	https://www.aafp.org/afp/2016/0515/p830.html
Gallstones	https://www.aafp.org/afp/2014/0515/p795.html
Nausea/Vomiting	https://www.aafp.org/afp/2013/0915/p371.html
Appendicitis	https://www.aafp.org/afp/2018/0701/p25.html https://www.aafp.org/afp/2005/0101/p71.html
Acute Pancreatitis	https://www.aafp.org/afp/2014/1101/p632.html
Chronic Pancreatitis	https://www.aafp.org/afp/2018/0315/p385.html
Diverticulitis	https://www.aafp.org/afp/2013/0501/p612.html
Diverticular Disease	https://www.aafp.org/afp/2005/1001/p1229.html
LLQ Pain	https://www.aafp.org/afp/2010/1001/p766.pdf
Intestinal Obstruction	https://www.aafp.org/afp/2018/0915/p362.html
Hernia	https://www.aafp.org/afp/2013/0615/p844.html
Noncardiac Preop Assessment	https://www.aafp.org/afp/2013/0315/p414.html
Perioperative Cardiac Risk Evaluation	https://www.aafp.org/afp/2012/0201/p239.pdf
Perioperative Antiplatelet Therapy	https://www.aafp.org/afp/2010/1215/p1484.pdf
Wound Care	https://www.aafp.org/afp/2015/0115/p86.html
Venous Ulcers	https://www.aafp.org/afp/2010/0415/p989.html
Diabetic Foot Ulcers	https://www.aafp.org/afp/2013/0801/p177.html
Pressure Ulcers	https://www.aafp.org/afp/2015/1115/p888.html
ICSI Guidelines	https://www.icsi.org/
Surgical Risk Calculator	http://riskcalculator.facs.org/RiskCalculator/
Preop iPhone App	Preop Eval (Steinburg) for iPhone

Interpersonal and Communication Skills Objectives and Competencies

Objectives:

- Communicate effectively with patients and their families while in the presence of their daily preceptor (C-1, C-2, C-3)
- Convey information in a clear and concise manner to patients, families, and other health professionals (i.e., use appropriate vocabulary choice, realistic outcomes, and working with difficult patients and family) (C-2)
- When consulted for pre-operative clearance or for medical management of surgical patients, residents should be able to provide effective consultative recommendations to requesting physicians (C-3, C-4)

Practice Based Learning and Improvement Objectives and Competencies:

Objectives:



- Develop tools to help meet the needs of patients (PBLI-1)
- Recognize own level of competence in handling surgical problems and the need for further consultation as appropriate. (PBLI-2)
- Incorporate evidence-based medicine and resources into the pre and post-operative care of surgical patients. (PBLI-1, PBLI-3)

Professionalism Objectives and Competencies:

Objectives:

- Provide compassionate and high-quality care to all patients regardless of gender, age, culture, race, religion, disabilities, sexual orientation or socioeconomic class (PROF-1, PROF-2)
- Determine best methods for consultation of subspecialty physicians while caring for the surgical patient (PROF-3)
- Behave in a professional manner when interacting with patients or other health care providers. (PROF-1, PROF-2)

Systems Based Practice Objectives and Competencies

Objectives:

- Incorporate considerations of cost awareness and risk/benefit analysis in patient care (SBP-1)
- Advocate for quality patient care and optimal patient care systems (SBP-3, SBP-2)
- Develop an understanding of the role of the primary care physician and the surgical specialists in the care of surgical patients (SBP-4)