

UH Emergency General Surgery Service Goals & Objectives

Intern (R-1)

A. Goals

1. Medical Knowledge

- a. Understand the pathophysiology and clinical presentation of the following emergency/urgent surgical problems:
 1. appendicitis
 2. bowel obstruction
 - i. small bowel
 - ii. large bowel
 - volvulus
 - tumor
 - stricture
 3. cholecystitis
 4. colonic diverticulitis
 5. soft tissue infection (uncomplicated, non-necrotizing)
 6. hernia
- b. Understand the appropriate use of antibiotics in the following emergency/urgent surgical problems:
 1. appendicitis
 2. cholecystitis
 3. colonic diverticulitis
 4. soft tissue infection (uncomplicated, non-necrotizing)
 5. C. diff colitis
- c. Understand the general principles of wound care.
 1. delayed closure
 2. wound vacs
- d. Understand the principles of postoperative feeding/nutrition.

2. Patient Care

- a. Learn to synthesize all available information in order to make appropriate clinical decisions.
- b. Understand the importance of generating accurate, thorough medical records.
- c. Understand appropriate initial nonoperative management of:
 1. partial small bowel obstruction
 2. uncomplicated diverticulitis
 3. cellulitis
- d. Develop technical skills for common procedures and operations encountered on the service appropriate for the intern level of training.
- e. Learn to review and evaluate imaging studies for common problems encountered.
- f. Understand principles of infection control.

3. Practice-based Learning and Improvement

- a. Develop an attitude of responsibility for the patients on the ward, and in so doing develop the skill of self-assessment with the goal of continuous improvement in practice management style.
- b. Understand the importance of critically reading and discussing medical literature pertinent to patients on the service.

4. Systems-based Practice

- a. Understand the importance of the supporting medical and ancillary services in the complete and efficient care of the patient.
- b. Develop a cost-effective attitude toward patient management.
 1. start discharge planning on admission
 2. anticipate daily lab needs
- c. Develop an appreciation for the patients' interests and convenience in care management plans.

5. Interpersonal and Communication Skills

- a. Develop the ability to respectfully and clearly communicate with other healthcare professionals.
- b. Learn to present patients to senior residents and attendings in an organized and precise manner.
- c. Learn how to function effectively as a member of a team.
- d. Learn to communicate effectively with patients and their families.
- e. Develop skill in conflict resolution.
- f. Follow the principle expressed in "How can I help you today?"

6. Professionalism

- a. Demonstrate respect and compassion for patients and professional staff on the wards, in the clinics, and in the operating room.
- b. Develop open-mindedness regarding alternative treatments.
- c. Understand need for continual self-assessment and improvement.

d. Develop an attitude of responsibility for patient care requests by senior residents and attendings.

B. OBJECTIVES

1. Medical Knowledge

a. Describe symptoms and physical exam findings consistent with acute appendicitis.

Name laboratory tests useful in the evaluation of acute appendicitis, and describe expected results in patients who have the disease.

Name radiographic studies useful in the evaluation of acute appendicitis, and describe expected findings in patients who have the disease.

b. List the etiologies of both small & large bowel obstruction.

Describe symptoms and physical exam findings consistent with small bowel obstruction.

Describe symptoms and physical exam findings consistent with large bowel obstruction; explain the differing presentations as related to the specific etiology.

Name the radiographic studies used to evaluate small bowel obstruction, and describe the expected findings in patients who have this problem.

Name the radiographic studies used to evaluate large bowel obstruction, and describe the expected findings in patients who have this problem; explain the differing findings as related to the specific etiology.

c. Define biliary colic, acute cholecystitis, and chronic cholecystitis.

Describe the pathogenesis of cholelithiasis (i.e., etiology and biochemical composition of gallstones) as it relates to biliary colic and cholecystitis.

Describe the symptoms and physical exam findings typical of biliary colic, acute cholecystitis, and chronic cholecystitis.

Name the radiographic studies useful in the evaluation of gallbladder and biliary tract disease, and describe the expected findings in uncomplicated cholelithiasis versus cholecystitis.

Name the laboratory tests useful in the evaluation of gallbladder and biliary tract disease, and explain the expected results in patients with cholecystitis.

d. Describe the etiology and usual anatomic distribution of typical colonic diverticulitis

Define “uncomplicated” diverticulitis.

Describe the symptoms and physical exam findings in a patient who presents with uncomplicated diverticulitis.

Name the radiographic studies useful in the evaluation diverticulitis, and describe the expected findings in patients who have uncomplicated disease.

Name the laboratory tests useful in the evaluation of diverticulitis, and explain the expected results in a patient who presents with this problem.

e. Define cellulitis and list the most common pathogens in “uncomplicated” cases.

Define abscess and list the most common pathogens in cases involving the torso/head/neck/extremities versus the perirectal area.

Describe the symptoms and physical exam findings in a patient who presents with an abscess of the torso, head/neck, and extremities.

Describe the symptoms and physical exam findings in a patient who presents with a perirectal abscess.

Name radiographic studies that may help differentiate between equivocal cases of abscess versus cellulitis, and describe the expected findings of abscess versus cellulitis.

Name the laboratory tests useful in the workup of cellulitis and abscess.

h. Describe appropriate perioperative antibiotic coverage for acute/uncomplicated versus perforated/ruptured appendicitis.

Describe appropriate antibiotic prophylaxis for patients undergoing operation for bowel obstruction.

Describe appropriate perioperative antibiotic coverage for acute cholecystitis.

Describe appropriate antibiotic coverage for uncomplicated acute diverticulitis.

Describe appropriate antibiotic coverage for patients with “uncomplicated” cellulitis; appropriate alternatives for patients who have penicillin allergies or MRSA.

Describe appropriate perioperative antibiotic coverage for abscess of the torso, head/neck, or extremities.

Describe appropriate perioperative antibiotic coverage for perirectal abscess.

i. With respect to wound closures, define and explain the indications for:

1. primary closure

2. delayed primary closure

3. healing by secondary intention

List (and explain the rationale for) the indications for nonclosure of surgical incisions (“leaving the wound open”).

Describe 3 forms of open wound dressing changes, including the Wound Vac system, and explain the rationale for effectiveness of each.

Describe the signs and physical exam findings of postoperative wound infection.

j. List the indications for placement of enteric feeding tubes (gastrostomy, jejunostomy, nasoduodenal).

Name at least 3 serious or life-threatening complications related to enteric feeding tubes.

Describe principles of postoperative feeding/nutrition in patients status post:

1. appendectomy
2. relief of bowel obstruction
3. cholecystectomy
4. small bowel or colon resection

2. Patient Care

a. Demonstrate the ability to produce a legible and thorough history and physical, which incorporates laboratory and diagnostic data, as well as an assessment and plan.

Demonstrate the ability to dictate a thorough yet concise discharge summary, which incorporates all of the following:

- name of attending physician
- primary final diagnosis
- additional pertinent diagnoses
- principal procedure
- additional procedures
- BRIEF summary of hospitalization
- discharge medications
- recommendations for post-hospital activity, diet, dressing changes
- follow-up appointment
- cc: to primary care physician and referring physician (if different)

Gain experience in the ability to dictate operative reports.

Assist the attending in producing a daily progress note for each patient, which is suitable for DRG identification and E/M coding.

b. Justify daily selection of laboratory and diagnostic testing for each patient on the service.

c. Describe the indications for nonsurgical management of partial small bowel obstruction.

Describe the components of the nonsurgical management of partial small bowel resection.

d. Describe the indications for nonsurgical management of uncomplicated diverticulitis.

Describe the components of the nonsurgical management of uncomplicated diverticulitis.

e. Describe appropriate management of uncomplicated cellulitis.

f. Develop technical skills for:

1. open appendectomy
2. open gastrostomy
3. open feeding jejunostomy
4. abscess drainage (including perirectal)
5. central line placement
6. opening of an infected postoperative wound

3. Practice-Based Learning

a. Critically discuss performance with respect to care of patients and progress made during rotation with Chief of Service or designee at mid-rotation meeting.

b. At least three times during the rotation, choose a pertinent issue pertaining to a patient on the service, and critically evaluate an article from the literature which addresses the problem, and present conclusions to the entire team on rounds.

4. Systems-based practice

a. Facilitate discharge planning by daily communication with inpatient care manager.

b. Describe indications for medical consultation in the pre- and post-operative periods, particularly with respect to these specialties:

- cardiology
- gastroenterology
- pain management service
- interventional radiology
- hematology

Facilitate daily communication with consulting physicians.

c. As pertinent for each individual patient, facilitate daily communication with ancillary services, such as:

- physical therapy
- occupational therapy
- speech
- enterostomal therapy
- nutrition

- mental health
- social services

5. Interpersonal and Communication Skills

- Consistently answer nursing questions/pages clearly and effectively.
- Present patients on inpatient rounds in an organized and concise manner.
- Present clinic patients to the attending efficiently to facilitate clinic flow.
- Gain experience in explaining results of evaluations and recommendations for treatment to patients and their families (practice patient education).

6. Professionalism

- Use appropriate speech and tone of voice when speaking to patients, families, and all other healthcare professionals.
Allow others the chance to speak, and listen attentively when being spoken to.
- Demonstrate a conscientious approach to patient care by minimizing delay of care and minimizing passage of incomplete tasks to fellow residents.

JUNIOR RESIDENT (R3)

A. GOALS

1. Medical Knowledge

- Understand the pathophysiology and clinical presentation of the following emergency/urgent surgical problems:
 - appendicitis (non-ruptured versus ruptured)
 - bowel obstruction (partial versus complete)
 - cholecystitis with or without choledocholithiasis
 - ascending cholangitis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - gastrointestinal hemorrhage
 - pancreatitis (uncomplicated versus complicated)
 - intra-abdominal abscess
 - C. diff colitis
 - hernias
 - ischemic bowel
- Understand the appropriate use of antibiotics in the following emergency/urgent surgical problems:
 - appendicitis
 - cholecystitis with or without choledocholithiasis
 - ascending cholangitis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - pancreatitis (uncomplicated versus complicated)
 - intra-abdominal abscess
 - UTI
 - C. diff colitis
 - Peptidocaul disease/H. pylori
- Understand the indications for operative intervention of:
 - appendicitis (non-ruptured versus ruptured)
 - bowel obstruction (partial versus complete)
 - cholecystitis with or without choledocholithiasis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - gastrointestinal hemorrhage
 - pancreatitis (uncomplicated versus complicated)
 - intra-abdominal abscess
 - ischemic bowel
 - iatrogenic perforation
 - inflammatory bowel disease
 - enterocutaneous fistula
 - nutrition/access
 - abdominal compartment syndrome

surgery and immunosuppression
technical aspects of muscle, lymph node, and nerve biopsy
surgery in pregnancy
surgery in Jehovah's Witnesses

- c. Understand the general principles of wound care.
- d. Understand the principles of postoperative feeding/nutrition.

2. Patient Care

- a. Learn to synthesize all available information in order to make appropriate clinical decisions.
- b. Understand the importance of generating accurate, thorough medical records.
- c. Understand appropriate nonoperative management of or alternative therapies for:
 - partial small bowel obstruction
 - uncomplicated diverticulitis
 - soft tissue cellulitis
 - intra-abdominal abscess
 - gastrointestinal bleeding
- d. Develop technical skills for common procedures and operations encountered on the service appropriate for the R3 level.
- e. Learn to manage ward emergencies
- f. Attend clinic Monday and Friday from 1:00 to 3:00 pm

3. Practice-based Learning

- a. Develop an attitude of responsibility for the patients on the ward, and in so doing develop the skill of self-assessment with the goal of continuous improvement in practice management style.
- b. Understand the importance of critically reading and discussing medical literature pertinent to patients on the service.

4. Systems-based Practice

- a. Understand the importance of the support of medical and ancillary services in the complete and efficient care of the patient.
- b. Develop a cost-effective attitude toward patient management.
- c. Develop an appreciation for the patients' interests and convenience in care management plans.
- d. Develop team leader management skills in the supervision of the R1, PA, and medical students.

5. Interpersonal and Communication Skills

- a. Perfect the ability to respectfully and clearly communicate with other healthcare professionals.
- b. Improve ability to present patients to senior residents and attendings in an organized and precise manner.
- c. Learn how to function effectively not only as a member of a team, but also as a team leader.
- d. Improve ability to communicate effectively with patients and their families.

6. Professionalism

- a. Demonstrate respect and compassion for patients and professional staff on the wards, in the clinics, and in the operating room.
- b. Develop open-mindedness regarding alternative treatments.
- c. Understand need for continual self-assessment and improvement.
- d. Develop an attitude of responsibility for patient care requests by senior residents, attendings, NP's, RN's, and other staff.
- e. Develop teaching skills with PA students, med students, and interns.

B. OBJECTIVES

1. Medical Knowledge

- a. Describe symptoms and physical exam findings consistent with acute appendicitis.
 - Name laboratory tests useful in the evaluation of acute appendicitis, and describe expected results in patients who have the disease.
 - Name radiographic studies useful in the evaluation of acute appendicitis, and describe expected findings in patients who have the disease.
 - List complete differential diagnosis of acute appendicitis
- b. List the etiologies of small & large bowel obstruction.
 - Describe symptoms and physical exam findings consistent with small bowel obstruction.
 - Describe symptoms and physical exam findings consistent with large bowel obstruction; explain the differing presentations as related to the specific etiology.
 - Name the radiographic studies used to evaluate small bowel obstruction, and describe the expected findings in patients who have this problem.

Name the radiographic studies used to evaluate large bowel obstruction, and describe the expected findings in patients who have this problem; explain the differing findings as related to the specific etiology.

Name laboratory tests useful in the evaluation and management of the fluid shifts associated with bowel obstruction; explain the expected results in patients presenting with early/partial versus complete obstruction.

- c. Define biliary colic, acute cholecystitis, chronic cholecystitis, and ascending cholangitis.

Describe the pathogenesis of cholelithiasis (i.e., etiology and biochemical composition of gallstones) as it relates to biliary colic and cholecystitis.

Describe the symptoms and physical exam findings typical of biliary colic, acute cholecystitis, chronic cholecystitis, and ascending cholangitis.

Name the radiographic studies useful in the evaluation of gallbladder and biliary tract disease, and describe the expected findings in uncomplicated cholelithiasis versus cholecystitis.

Name the laboratory tests useful in the evaluation of gallbladder and biliary tract disease, and explain the expected results in patients with cholecystitis and ascending cholangitis.

- d. Describe the etiology and usual anatomic distribution of typical colonic diverticulitis

Define “uncomplicated” and “complicated” diverticulitis.

Describe the symptoms and physical exam findings in a patient who presents with uncomplicated versus complicated diverticulitis.

Name the radiographic studies useful in the evaluation of diverticulitis, and describe the expected findings in patients who have uncomplicated versus complicated disease.

Name the laboratory tests useful in the evaluation of diverticulitis, and explain the expected results in a patient who presents with this problem.

- e. Define cellulitis and list the most common pathogens in “uncomplicated” and “complicated” cases.

Describe the symptoms and physical exam findings in a patient who presents with an uncomplicated case of cellulites versus the findings that indicate the likelihood of complicated i.e. necrotizing infection.

Define abscess and list the most common pathogens in cases involving the torso/head/neck/extremities versus the perirectal area.

Describe the symptoms and physical exam findings in a patient who presents with an abscess of the torso, head/neck, and extremities.

Describe the symptoms and physical exam findings in a patient who presents with a perirectal abscess.

Describe the possible complications of a complicated or untreated perirectal abscess

Name radiographic studies that may help differentiate between equivocal cases of abscess versus cellulitis, and describe the expected findings of abscess versus cellulitis.

Name the laboratory tests useful in the workup of cellulitis and abscess.

- f. List the most common etiologies of upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.

Describe the history and physical exam findings consistent with upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.

Name the radiographic and endoscopic tests useful in the workup of upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.

Name the laboratory tests useful in the evaluation of gastrointestinal hemorrhage.

Describe the *specific* indications for and appropriate peptic ulcer prophylaxis in routine postop patients.

- g. List the most common etiologies of pancreatitis.

Explain the difference between acute and chronic pancreatitis.

Define and list Ranson’s criteria.

List the potential long-term sequelae of pancreatitis.

Describe the history and physical exam findings consistent with acute versus chronic pancreatitis.

Name the radiographic studies helpful in the diagnosis and characterization of pancreatitis, and describe the expected findings in acute versus chronic disease.

Name the laboratory tests helpful in the diagnosis and management of pancreatitis

- h. Describe appropriate perioperative antibiotic coverage for acute/uncomplicated versus perforated/ruptured appendicitis.

- Describe appropriate antibiotic prophylaxis for patients undergoing operation for bowel obstruction.
- Describe appropriate perioperative antibiotic coverage for acute cholecystitis.
- Describe appropriate antibiotic coverage for uncomplicated acute diverticulitis.
- Describe appropriate antibiotic coverage for patients with “uncomplicated” cellulitis; describe appropriate alternatives for patients who have penicillin allergies or MRSA.
- Describe appropriate perioperative antibiotic coverage for abscess of the torso, head/neck, or extremities.
- Describe appropriate perioperative antibiotic coverage for perirectal abscess.
- i. With respect to wound closures, define and explain the indications for:
 - primary closure
 - delayed primary closure
 - healing by secondary intention
 List (and explain the rationale for) the indications for nonclosure of surgical incisions (“leaving the wound open”).
 - Describe 3 forms of open wound dressing changes, including the Wound Vac system, and explain the rationale for effectiveness of each.
 - Describe the signs and physical exam findings of postoperative wound infection.
- j. List the indications for placement of enteric feeding tubes (gastrostomy, jejunostomy, nasoduodenal).
 - Name at least 3 serious or life-threatening complications related to enteric feeding tubes.
 - Describe principles of postoperative feeding/nutrition in patients status post:
 - appendectomy
 - relief of bowel obstruction
 - cholecystectomy
 - small bowel or colon resection

2. Patient Care

- a. Demonstrate the ability to produce a complete emergency department consultation which includes a legible and thorough history and physical, laboratory and diagnostic data, and an analytical and appropriate assessment and plan.
 - Demonstrate the ability to dictate a thorough yet concise operative report, which incorporates all of the following:
 - Attending and resident surgeons
 - Pre and post-operative diagnoses
 - Operation performed
 - Brief narrative of operative indication
 - Brief summary of findings
 - Pertinent description of operation
 - Disposition of patient postoperatively
 - Assist the attending in producing a daily progress note for each patient, which is suitable for DRG identification and E/M coding.
- b. Justify daily selection of laboratory and diagnostic testing for each patient on the service.
- c. Describe the indications for and components of nonsurgical management of partial small bowel obstruction.
- d. Describe the indications for nonsurgical management of uncomplicated diverticulitis
 - Describe the components of the nonsurgical management of uncomplicated diverticulitis.
- e. Describe appropriate management of uncomplicated cellulitis.
- f. Improve technical skills for:
 - open appendectomy
 - open gastrostomy
 - open feeding jejunostomy
 - abscess drainage (including perirectal)
 - central line placement
 - opening of an infected postoperative wound
- g. Develop technical skills for:
 - Laparoscopic appendectomy
 - Laparoscopic and open cholecystectomy
 - Lysis of adhesions
 - Colostomy
 - Debridement of necrotic soft tissue
- h. See consults promptly
 - i. recognize acuity of illness

- ii. observe the surgical chain of command
- i. Learn how to “troubleshoot” wound vacs
- j. Become knowledgeable about ostomy case

3. Practice-Based Learning

- a. Critically discuss performance with respect to care of patients and progress made during rotation with Chief of Service or designee at mid-rotation meeting.
- b. Three times during the 6 week rotation, choose a pertinent issue pertaining to a patient on the service, critically evaluate an article from the literature which addresses the problem, and present summary to weekly multi-disciplinary Trauma/EGS Conference.
- c. When requested by the Quality Assurance Program, prepare patient and literature presentation relating to a complication or death on the service and present to weekly M&M conference.

4. Systems-based practice

- a. Facilitate discharge planning by supervising daily communication between team and the inpatient care manager.
- b. Describe indications for medical consultation in the pre- and post-operative periods, particularly with respect to these specialties:
 - cardiology
 - gastroenterology
 - pain management service
 - interventional radiology
 - hematology

Facilitate daily communication with consulting physicians.
- c. As pertinent for each individual patient, facilitate daily communication with ancillary services, such as:
 - physical therapy
 - occupational therapy
 - speech
 - enterostomal therapy
 - nutrition
 - mental health
 - social services
- d. Develop a new or improve an existing patient care management pathway/protocol.

5. Interpersonal and Communication Skills

- a. Consistently answer nursing questions/pages clearly and effectively.
- b. Consistently communicate patient assessments and plans to senior resident or attending surgeon.
- c. Present clinic patients to the attending surgeon efficiently to facilitate clinic flow.
- d. Consistently respond to consultation requests by the ER and inpatient ward teams in a timely fashion.
- e. Gain experience in explaining results of evaluations and recommendations for treatment to patients and their families (practice patient education).

6. Professionalism

- a. Use appropriate speech and tone of voice when speaking to patients, families, and all other healthcare professionals.
- b. Allow others the chance to speak, and listen attentively when being spoken to.
- c. Demonstrate a conscientious approach to patient care by minimizing delay of care and minimizing passage of incomplete tasks to fellow residents.

CHIEF RESIDENT (R5)

A. GOALS

1. Medical Knowledge

- a. Understand the pathophysiology and clinical presentation of the following emergency/urgent surgical problems:
 - appendicitis (non-ruptured versus ruptured)
 - bowel obstruction (partial versus complete)
 - cholecystitis with or without choledocholithiasis
 - ascending cholangitis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - gastrointestinal hemorrhage

- pancreatitis (uncomplicated versus complicated)
- intra-abdominal abscess
- ischemic bowel disease
- colonic volvulus
- other abdominal catastrophe
- complex hernias
- esophageal perforations
- abdominal compartment syndrome
- immunosuppression in surgery
- iatrogenic bowel perforation
- complications of bariatric surgery
- b. Understand the appropriate use of antibiotics in the following emergency/urgent surgical problems:
 - appendicitis
 - cholecystitis with or without choledocholithiasis
 - ascending cholangitis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - pancreatitis (uncomplicated versus complicated)
 - abdominal catastrophe
- c. Understand the indications for operative intervention of:
 - appendicitis (non-ruptured versus ruptured)
 - bowel obstruction (partial versus complete)
 - cholecystitis with or without choledocholithiasis
 - colonic diverticulitis (uncomplicated versus ruptured)
 - soft tissue infection (uncomplicated versus necrotizing)
 - gastrointestinal hemorrhage
 - pancreatitis (uncomplicated versus complicated)
 - intra-abdominal abscess
 - ischemic bowel disease
 - sigmoid volvulus
 - abdominal catastrophe
 - iatrogenic bowel perforations
 - complications of bariatric surgery
- c. Understand the general and advanced principles of wound care.
- d. Understand the principles of pre and postoperative feeding/nutrition.

2. Patient Care

- a. Learn to synthesize all available information in order to make appropriate clinical decisions.
- b. Understand the importance of generating accurate, thorough medical records.
- c. Understand appropriate nonoperative management of or alternative therapies for:
 - partial small bowel obstruction
 - uncomplicated diverticulitis
 - soft tissue cellulitis
 - intra-abdominal abscess
 - gastrointestinal bleeding
 - ischemic bowel disease
 - colonic volvulus
- d. Develop technical skills for common procedures and operations encountered on the service appropriate for the R5 level.

3. Practice-based Learning

- a. Develop an attitude of responsibility for the patients on the ward and in the ICU, and in so doing develop the skill of self-assessment with the goal of continuous improvement in practice management style.
- b. Understand the importance of critically reading and discussing medical literature pertinent to patients on the service.

4. Systems-based Practice

- a. Understand the importance of supporting medical and ancillary services in the complete and efficient care of the patient.
- b. Develop a cost-effective attitude toward patient management.
- c. Develop an appreciation for the patients' interests and convenience in care management plans.

- d. Develop team leader management skills in the supervision of the R1, R3, PA, and medical students.

5. Interpersonal and Communication Skills

- a. Perfect the ability to respectfully and clearly communicate with other healthcare professionals.
- b. Perfect ability to present patients to attendings in an organized and precise manner.
- c. Perfect ability to function not only as a member of a team, but also as a team leader.
- d. Perfect ability to communicate effectively with patients and their families.

6. Professionalism

- a. Demonstrate respect and compassion for patients and professional staff on the wards, in the clinics, and in the operating room.
- b. Develop open-mindedness regarding alternative treatments.
- c. Understand need for continual self-assessment and improvement.
- d. Develop an attitude of responsibility for patient care requests by other residents and attendings.
- e. Develop skill in multitasking and problem solving

B. OBJECTIVES

1. Medical Knowledge

- a. Describe symptoms and physical exam findings consistent with acute appendicitis.
Name laboratory tests useful in the evaluation of acute appendicitis, and describe expected results in patients who have the disease.
Name radiographic studies useful in the evaluation of acute appendicitis, and describe expected findings in patients who have the disease.
List complete differential diagnosis of acute appendicitis
- b. List the etiologies of small & large bowel obstruction.
Describe symptoms and physical exam findings consistent with small bowel obstruction.
Describe symptoms and physical exam findings consistent with large bowel obstruction; explain the differing presentations as related to the specific etiology.
Name the radiographic studies used to evaluate small bowel obstruction, and describe the expected findings in patients who have this problem.
Name the radiographic studies used to evaluate large bowel obstruction, and describe the expected findings in patients who have this problem; explain the differing findings as related to the specific etiology.
Name laboratory tests useful in the evaluation and management of the fluid shifts associated with bowel obstruction; explain the expected results in patients presenting with early/partial versus complete obstruction.
- c. Define biliary colic, acute cholecystitis, chronic cholecystitis, and ascending cholangitis.
Describe the pathogenesis of cholelithiasis (i.e., etiology and biochemical composition of gallstones) as it relates to biliary colic and cholecystitis.
Describe the symptoms and physical exam findings typical of biliary colic, acute cholecystitis, chronic cholecystitis, and ascending cholangitis.
Name the radiographic studies useful in the evaluation of gallbladder and biliary tract disease, and describe the expected findings in uncomplicated cholelithiasis versus cholecystitis.
Name the laboratory tests useful in the evaluation of gallbladder and biliary tract disease, and explain the expected results in patients with cholecystitis and ascending cholangitis.
- d. Describe the etiology and usual anatomic distribution of typical colonic diverticulitis
Define “uncomplicated” and “complicated” diverticulitis.
Describe the symptoms and physical exam findings in a patient who presents with uncomplicated versus complicated diverticulitis.
Name the radiographic studies useful in the evaluation of diverticulitis, and describe the expected findings in patients who have uncomplicated versus complicated disease.
Name the laboratory tests useful in the evaluation of diverticulitis, and explain the expected results in a patient who presents with this problem.
- e. Define cellulitis and list the most common pathogens in “uncomplicated” and “complicated” cases.
Describe the symptoms and physical exam findings in a patient who presents with an uncomplicated case of cellulites versus the findings that indicate the likelihood of complicated i.e. necrotizing infection.
Define abscess and list the most common pathogens in cases involving the torso/head/neck/extremities versus the perirectal area.

- Describe the symptoms and physical exam findings in a patient who presents with an abscess of the torso, head/neck, and extremities.
- Describe the symptoms and physical exam findings in a patient who presents with a perirectal abscess.
- Describe the possible complications of a complicated or untreated perirectal abscess.
- Name radiographic studies that may help differentiate between equivocal cases of abscess versus cellulitis, and describe the expected findings of abscess versus cellulitis.
- Name the laboratory tests useful in the workup of cellulitis and abscess.
- Describe the indications for aggressive, life-saving exploration and debridement of spreading necrotizing soft tissue infection and the criteria for adequate debridement.
- f. List the most common etiologies of upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.
 - Describe the history and physical exam findings consistent with upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.
 - Name the radiographic and endoscopic tests useful in the workup of upper gastrointestinal hemorrhage versus lower gastrointestinal hemorrhage.
 - Name the laboratory and radiologic tests useful in the evaluation of gastrointestinal hemorrhage.
 - Describe the *specific* indications for and appropriate peptic ulcer prophylaxis in routine postop patients.
 - Describe the surgical and nonsurgical management of acute variceal hemorrhage.
 - Describe the specific indications for operative intervention of upper and lower gastrointestinal hemorrhage.
- g. List the most common etiologies of pancreatitis.
 - Explain the difference between acute, chronic, and necrotizing pancreatitis.
 - Define and list Ranson's criteria.
 - List the potential acute, severe and long-term, chronic sequelae of pancreatitis.
 - Describe the history and physical exam findings consistent with acute versus chronic pancreatitis versus necrotizing pancreatitis.
 - Name the radiographic studies helpful in the diagnosis and characterization of pancreatitis, and describe the expected findings in acute versus chronic versus necrotic disease.
 - Name the laboratory tests helpful in the diagnosis and management of pancreatitis.
 - Describe the specific indications for surgical debridement of necrotizing pancreatitis.
- h. Describe appropriate perioperative antibiotic coverage for acute/uncomplicated versus perforated/ruptured appendicitis.
 - Describe appropriate antibiotic prophylaxis for patients undergoing operation for bowel obstruction.
 - Describe appropriate perioperative antibiotic coverage for acute cholecystitis.
 - Describe appropriate antibiotic coverage for uncomplicated acute diverticulitis.
 - Describe appropriate antibiotic coverage for patients with "uncomplicated" cellulitis; describe appropriate alternatives for patients who have penicillin allergies or MRSA.
 - Describe appropriate perioperative antibiotic coverage for abscess of the torso, head/neck, or extremities.
 - Describe appropriate perioperative antibiotic coverage for perirectal abscess.
- i. With respect to wound closures, define and explain the indications for:
 - primary closure
 - delayed primary closure
 - healing by secondary intention
 - List (and explain the rationale for) the indications for nonclosure of surgical incisions ("leaving the wound open").
 - Describe 3 forms of open wound dressing changes, including the Wound Vac system, and explain the rationale for effectiveness of each.
 - Describe the signs and physical exam findings of postoperative wound infection.
- j. List the indications for placement of enteric feeding tubes (gastrostomy, jejunostomy, nasoduodenal).
 - Name at least 3 serious or life-threatening complications related to enteric feeding tubes.
 - Describe principles of postoperative feeding/nutrition in patients status post:
 - appendectomy
 - relief of bowel obstruction
 - cholecystectomy
 - small bowel or colon resection
 - abdominal catastrophe

k. Describe the indications for the use of the “open abdomen technique” in the management of the abdominal catastrophe, including peritonitis, necrotizing pancreatitis, and abdominal compartment syndrome.

2. Patient Care

a. Demonstrate the ability to evaluate in concert with the junior resident, an emergency department consultation of a complicated patient that requires an advanced analysis of the history and physical exam, laboratory and diagnostic data, and to present the findings and a thoughtful plan to the attending surgeon.

Perfect the ability to dictate a thorough yet concise operative report, which incorporates all of the following:

- Attending and resident surgeons
- Pre and post-operative diagnoses
- Operation performed
- Brief narrative of operative indication
- Brief summary of findings
- Pertinent description of operation
- Disposition of patient postoperatively

b. Describe the indications for and components of nonsurgical management of partial small bowel obstruction.

c. Describe the indications for nonsurgical management of uncomplicated diverticulitis.

d. Describe appropriate management of uncomplicated cellulitis.

e. Master technical skills for:

- Open and laparoscopic appendectomy, including ruptured appendectomy
- Open and laparoscopic cholecystectomy with cholangiogram
- Lysis of adhesions
- Colostomy

Exploratory laparotomy for abdominal catastrophe

Debridement of necrotic pancreas

Debridement of necrotic soft tissue

Open abdominal techniques/temporary abdominal closure

3. Practice-Based Learning

a. Critically discuss performance with respect to care of patients and progress made during rotation with Chief of Service or designee at mid-rotation meeting.

b. Three times during the 6 week rotation, choose a pertinent issue pertaining to a patient on the service, critically evaluate an article from the literature which addresses the problem, and present summary to weekly multi-disciplinary Trauma/EGS Conference.

c. When requested by the Quality Assurance Program, prepare patient and literature presentation relating to a complication or death on the service and present to weekly M&M conference.

4. Systems-based practice

a. Facilitate discharge planning by supervising daily communication between resident team and the inpatient care manager.

b. Describe indications for medical consultation in the pre- and post-operative periods, particularly with respect to these specialties:

- cardiology
- gastroenterology
- pain management service
- interventional radiology
- hematology

Facilitate daily communication with consulting physicians.

c. As pertinent for each individual patient, facilitate daily communication with ancillary services, such as:

- physical therapy
- occupational therapy
- speech
- enterostomal therapy
- nutrition
- mental health
- social services

d. Develop a new or improve an existing patient care management pathway/protocol.

5. Interpersonal and Communication Skills

- a. Consistently answer nursing and junior resident questions/pages clearly and effectively.
- b. Consistently communicate patient assessments and plans to other residents or attending surgeon.
- c. Present clinic patients to the attending surgeon efficiently to facilitate clinic flow.
- d. Consistently respond to consultation requests by the ER and inpatient ward teams in a timely fashion.
- e. Perfect skill of explaining results of evaluations and recommendations for treatment to patients and their families (patient education).
- f. Demonstrate effective teaching of students, interns, PA students, NP's and junior residents

6. Professionalism

- a. Use appropriate speech and tone of voice when speaking to patients, families, and all other healthcare professionals.
- b. Allow others the chance to speak, and listen attentively when being spoken to.
- c. Demonstrate a conscientious approach to patient care by minimizing delay of care and minimizing passage of incomplete tasks to fellow residents.
- d. Manage time and personnel effectively
 - i. Make sure juniors are ACGME compliant
 - ii. Recognize personal and professional problems in self and others that are interfering with team care
 - iii. Know when and where to go for help with problems