



## Clinical Rotation Learning Objectives

### General Surgery

#### Student-Preceptor Collaboration Objectives:

**Note to the Preceptor:** The following objectives are meant to help guide clinical discussion with the student. We hope these discussions will further enhance their clinical skill in formulating differential diagnoses, determining appropriate diagnostic work up, and formulating a care plan.

- Given a patient care situation where a patient presents with **dyspnea on exertion** and/or syncope, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **chest pain or a history of angina**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **easy bruising or bleeding**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **abdominal pain, nausea/vomiting, diarrhea, and/or constipation**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **jaundice and/or anorexia**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **dyspepsia and/or hematemesis**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **shortness of breath with or without fatigue**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **hemoptysis and/or weight loss**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.

- Given a patient care situation where a patient presents with **acute changes in speech and/or vision**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **Acid/Base disorders**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **kidney-related edema**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **tremors and/or palpitations**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **fatigue and/or heat/cold intolerance**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with **breast or uterine pain**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.
- Given a patient care situation where a patient presents with a **rash, erythema, and/or discharge**, construct a broad differential diagnosis and formulate an evidence-based treatment plan that incorporates the principles consistent with an interprofessional, team care approach.

### **Student Self-Study Objectives:**

**Note to the Preceptor:** The following objectives correlate with the End-of-Rotation examination the student will be taking at the end of the General Surgery rotation. These are meant to guide their self-study. We realize this is not an all-inclusive list for a primary care provider. Their second primary care rotation objectives will be built around the other material that could have been included here.

- With regards to **pre-operative evaluation and assessment**, demonstrate proficient clinical knowledge in an evidence-based workup of the following situations, considering etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Cardiac Disease (History of myocardial infarction, unstable angina, valvular disease, hypertension, arrhythmias, heart failure)
  - Pulmonary Disease (History of asthma, chronic obstructive pulmonary disease)
  - Metabolic Disease (History of diabetes, adrenal insufficiency)
  - Hematologic Disease (History of clotting disorders, anticoagulant use)

- Tobacco use/dependence
- Substance abuse
- With regards to **post-operative care**, demonstrate proficient clinical knowledge in the following complications or outcomes, considering etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Post-operative fever
  - Wound infections
  - Deep venous thrombosis
  - Fluid/volume disorders (volume overload/depletion)
  - Acid/Base disorders
- For the following conditions relating to **surgery (Cardiovascular)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Claudication
  - Aortic aneurysm/dissection
  - Arterial embolism/thrombosis
  - Peripheral arterial disease
  - Arterial/venous ulcer disease
  - Varicose veins
- For the following conditions relating to **surgery (Hematology)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations
  - Anemia
  - Fatigue
- For the following conditions relating to **surgery (Gastrointestinal/Nutritional)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Obstipation
  - Melena/Hematochezia
  - Esophageal cancer
  - Esophageal strictures
  - Hiatal hernia
  - Peptic ulcer disease
  - Gastric cancer
  - Pyloric stenosis
  - Acute/chronic Cholecystitis
  - Cholelithiasis/Choledocholithiasis
  - Cholangitis
  - Hepatic carcinoma
  - Acute/chronic pancreatitis

- Pancreatic pseudocyst
- Pancreatic carcinoma
- Appendicitis
- Inflammatory bowel disease
- Small bowel carcinoma
- Toxic megacolon
- Colorectal carcinoma
- Diverticular disease
- Bowel obstruction (small, large, volvulus)
- Anal disease (fissures, abscess, fistula)
- Hemorrhoids
- Hernias (inguinal, femoral, incisional)
- Bariatric surgery
- For the following conditions relating to **surgery (Pulmonology)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Lung carcinoma
  - Pleural effusion
  - Pneumothorax
  - Post-operative pneumonia
- For the following conditions relating to **surgery (Neurology/Neurosurgery)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Paralysis or paresis
  - Paresthesias
  - Vascular disorders (carotid disease)
  - Subarachnoid hemorrhage
  - Subdural hematoma
  - Epidural hematoma
- For the following conditions relating to **surgery (Urology/Renal)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Orthostatic hypotension
  - Urinary retention
  - Dysuria
  - Fluid and electrolyte disorders
  - Testicular carcinoma
  - Wilms tumor
  - Bladder carcinoma
  - Renal cell carcinoma
  - Chronic renal failure (shunts/access)
  - Renal vascular disease

- Nephrolithiasis
- For the following conditions relating to **surgery (Endocrinology)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Hyperparathyroidism
  - Hyperthyroidism
  - Thyroid nodules
  - Thyroid carcinoma
  - Adrenal carcinoma
  - Pheochromocytoma
- For the following conditions relating to **surgery (Obstetrics/Gynecology)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Breast skin changes
  - Nipple discharge
  - Adenopathy
  - Benign breast disease (fibroadenomas, fibrocystic breast disease)
  - Breast carcinoma
- For the following conditions relating to **surgery (Dermatology)**, demonstrate proficient clinical knowledge in the etiology, epidemiology, pathophysiology, clinical presentation, diagnostic evaluation, management, potential complications and referral considerations:
  - Drug eruptions (post-operative)
  - Urticaria (post-operative)
  - Cellulitis
  - Burns
  - Pressure ulcers
  - Basal cell carcinoma
  - Squamous cell carcinoma
  - Melanoma