2016-17 Clerkship-Level Overarching Goals and Learning Activity Objectives

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2016-17 Anesthesiology Clerkship Overarching Goals

Knowledge for Practice
1. Explain the anatomy, physiology, and pharmacology relevant to anesthetic induction, maintenance, and emergence.
2. Explain the anatomy, physiology, and pharmacology relevant to critical care and emergency management.
3. Explain the anatomy, physiology, and pharmacology relevant to pain management.
4. Identify medical conditions that affect anesthetic risk by organ system and describe the role of medical management of these conditions in changing anesthetic risk.

Problem Solving and Clinical Skills/Patient Care
1. Demonstrate the basics of resuscitation, including the basics of intravenous access, and safely managing an airway.
2. Identify anesthetic options, including general, regional, monitored anesthetic care, and procedural sedation.
3. Complete a preoperative history and physical focusing on anesthetic concerns.
4. Recognize complex issues in the management of a patient with a pain syndrome.
5. Compare options for acute pain management in the surgical setting.

Practice Based Learning and Improvement
1. Interpret the medical literature and apply it to the practice of evidence-based medicine.
2. Be aware of scientific advances and their impact on modern anesthesia practice.
3. Incorporate feedback regarding technical skill and clinical performance into improved clinical skill technique and patient care.

Systems Based Practice
1. Explain the anesthesiologist's perioperative role, which extends through preoperative evaluation, the administration of anesthesia and postoperative recuperation.
2. Recognize the contributions of all members of the care team in the perioperative and intraoperative arena, and identify a unique situation of simultaneous co-management of a patient by the surgical and anesthetic teams.
3. Apply universal precautions in patient care for safety of patients and staff.
4. Apply HIPAA confidentiality regulations into patient care.
5. Recognize the impact of patient social issues on barriers to care.

Interpersonal and Communication Skills
1. Present preoperative plans clearly and concisely to their resident and attending physician mentors.
2. Communicate concern in critical situations, including use of team and crew resource management communication skills.
3. Describe the teamwork necessary to provide high-quality medical care in the perioperative setting.
4. Recognize the impact of patients’ preconceptions on anesthetic plans or decisions, including informed consent.

Professionalism
1. Complete assigned duties in a timely fashion.
2. Demonstrate respectful communication with patients, faculty and staff.
3. Recognize the impact of patient and family culture on anesthetic decision-making.
4. Adhere to ethical principles and exhibit ethical decision making in all aspects of the perioperative care of patients.
2016-17 Anesthesia Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

Operating Room

1. Demonstrate and routinely practice appropriate universal precautions.
2. Assist in preoperative preparation of patient including IV placement.
3. Assist in patient transfer/transport and monitoring en-route to OR.
5. Describe the anatomy, pharmacology and physiology relevant to anesthetic induction, maintenance and emergence.
6. Demonstrate ability to manage the airway of a patient under general anesthesia with bag-mask ventilation, intubation or LMA placement.

Anesthesia Preoperative Clinic

1. Discuss the impact of a patient’s comorbidities on their suitability, readiness and/or medical optimization for anesthesia and surgery.
2. Observe informed consent process.

DIDACTICS

Lectures

Airway Lecture

1. Explain the roles of the members of the anesthesia team in the perioperative care of patients.
2. Describe the basic forms of anesthesia delivered.
3. Describe the basic conduct of a general anesthetic.
4. Explain pre-anesthetic airway assessment.
5. Describe the anatomy relevant to tracheal intubation, LMA placement and bag-mask ventilation.
6. Describe measures in failed intubation.
7. Describe complications that can arise from airway management.
8. Identify several advanced airway apparatus.

Medication Lecture

Identify, describe, and compare various anesthetic induction and perianesthetic pharmaceuticals including the following categories:

- Induction agents
- Benzodiazepines (common pre-medications)
- Opioids
- Muscle relaxants and reversal agents
- Volatile anesthetics
- Local anesthetics
- Vasoactive substances

**Conscious Sedation Lecture**

1. List goals for conscious sedation.
2. Describe the difference between various levels of sedation.
3. Describe loss of consciousness.
4. List potential complications associated with conscious sedation.
5. Describe monitoring requirements for conscious sedation.
6. Discuss appropriate conscious sedation cases.
7. List discharge criteria after a conscious sedation procedure.
8. Discuss various pharmacological agents used in the practice of conscious sedation.

**Vasopressor Lecture**

1. Describe the mechanisms causing hypotension.
2. Compare the various hemodynamic monitoring methods.
3. Identify the risks of central line placement.
4. Interpret cardiac output measurement and SVR calculation.
5. Explain the mechanisms of action of vasopressors and inotropes.

**Pediatric Anesthesiology Lecture**

1. List differences between adult & pediatric airway anatomy & understand implications for intubation.
2. List standard required NPO times for infants and children for clear liquids, breast milk, and solids.
3. Calculate fluid requirements and allowable blood loss for uncomplicated pediatric cases.
4. Define a rapid sequence induction and list its indications.
5. List normal vital sign ranges for infants and children.
6. Discuss the impact of upper respiratory tract infections on anesthetic complications.
7. List physiologic differences between infants and adults by organ system.
8. Discuss methods of inducing anesthesia in pediatric patients.
9. Discuss anxiety in children preparing for surgery, and list pre-medication options.

**Pharmacogenetics Lecture**

1. Describe some of the impacts of advances in genetic science on modern medical practice.
2. List some of the ways in which drugs are metabolized.
3. List some of the implications of genetics on a patient’s ability to tolerate anesthesia.
Acute Pain Management Lecture

1. Describe the assessment of acute pain.
2. Describe the pathophysiology of acute pain and nociception.
3. List major differentiating features between acute and chronic pain.
4. Describe the pathophysiology of the surgical stress response to pain.
5. Illustrate, compare and contrast the pharmacology of analgesic agents including opioids, NSAIDs and other analgesics.
6. Discuss the differences between various neuraxial analgesic techniques.
7. Discuss the anatomy and physiology of peripheral nerve blockade.
8. Discuss the acute pain management in the opioid tolerant patient.

OTHER REQUIREMENTS

Problem-Based Learning Discussions (PBLD)

Ethics PBLD

1. Describe the classic value conflict for physicians who care for Jehovah’s Witness patients.
2. Discuss the medical, ethical and legal issues in cases where patients refuse standard blood transfusion/conservation therapies.
3. Discuss the concept of a minimal safe hematocrit.
4. Discuss the multiple aspects of a comprehensive blood conservation program.

Obstetrics PBLD

1. List physiological changes of pregnancy and discuss their impact on anesthetic management.
2. Describe supine hypotensive syndrome.
3. List the causes of pain during the first and second stages of labor and the dermatomes with which they are associated.
4. List options for labor analgesia.
5. Discuss the risks/benefits of epidural analgesia and the side effects of epidural analgesia.
6. Discuss the influence of epidural placement on the course of labor.
7. List factors that influence the placental transfer of drugs.
8. Explain how pregnancy affects a woman’s response to drugs (inhalation agents, intravenous medications, local anesthetics).
9. Compare the safety of general anesthesia with neuraxial anesthesia for cesarean section.
10. Discuss the management of the post-operative pain for cesarean section.
QI PBLD

1. Discuss the principles of total quality management in a health care system related to a perioperative case, including:
   a. Intention to improve
   b. Definition of quality
   c. Measurement of quality
   d. Understanding interdependence
   e. Understanding systems
   f. Investment in learning
   g. Reduction in costs
   h. Leadership commitment

Labs

Airway Lab

1. Practice mask ventilation, LMA placement and intubation on airway models.
2. Apply knowledge of airway anatomy to airway management skill.
3. Explain airway management steps and repeat the standard steps in management of an average airway.
4. Demonstrate basic direction/management of assisting team members.

IV Skills Lab

1. Practice peripheral venous access placement on hand and arm models.
2. Assess and select appropriate vein and location for intravenous access.
3. Demonstrate intravenous puncture, catheter placement and fluid line connection.

Simulation Lab

1. Demonstrate the ability to communicate concern for a patient’s safety or health.
2. Demonstrate the ability to organize communication with a care team in an unfamiliar situation.
3. Describe the developing unstable situation for a simulated patient.
4. Evaluate the level of intervention required to improve the patient’s health.
5. Choose an appropriate course of action or treatment for the patient.

Acute Pain Day Rotation

1. Perform an assessment of a postoperative patient experiencing acute pain.
2. Discuss management of patients who have received acute pain interventional therapy.
Anesthesiology Grand Rounds

1. Identify new areas of research and practice, and incorporate this knowledge into their practice.

Writing Assignment

1. Be able to perform a literature search on an anesthetically relevant public health topic.
2. Discuss the impact of smoking cessation on perioperative outcomes.
3. Describe the potential role of anesthesiologist on long-term smoking cessation.
2016-17 Internal Medicine Clerkship Overarching Goals

OVERARCHING GOALS

Knowledge for Practice:

1. Recognize the physiologic mechanisms that explain key findings in the history and physical exam.
2. Describe the etiologies, pathophysiology, clinical features, differential diagnosis, and related diagnostic testing and management of common inpatient medical conditions.

Problem Solving and Clinical Skills/Patient Care:

1. Complete a patient’s history and physical exam in a respectful, logical organized and thorough manner. When necessary, obtain supplemental historical information from collateral sources, such as significant others or previous physicians.
2. Evaluate and prioritize problems with which a patient presents, appropriately synthesizing these into logical clinical syndromes.
3. Formulate a differential diagnosis based on the findings from the history and physical examination and apply differential diagnosis to help guide diagnostic test ordering and sequencing.
4. Formulate an initial therapeutic plan and explain the extent to which the therapeutic plan is based on pathophysiologic reasoning and scientific evidence of effectiveness.

Practice-Based Learning and Improvement:

1. Recognize when additional information is needed to care for the patient and demonstrate ongoing commitment to self-directed learning.
2. Demonstrate ability to answer clinical questions using evidence-based medicine.
3. Analyze gaps in knowledge and skills and see resources including assistance from colleagues to address gaps.
4. Consider factors when performing diagnostic testing, including pretest probability, performance characteristics of tests (sensitivity, specificity, and likelihood ratios) and cost, risk and patient preferences and interpret these tests.

Systems-Based Practice:

1. Differentiate the role and contribution of each team member to the care of the patient, and call on interdisciplinary resources (case workers, nurses, physical therapists, etc.) to provide optimal and comprehensive care.
2. Apply health systems-based thinking to address outcomes in patient care.
3. Consider patient, physician, and system barriers (including cost) to successfully
negotiate treatment plans and patient adherence; and understand strategies that may be used to overcome these barriers.

**Interpersonal and Communication Skills:**

1. Demonstrate appropriate listening and verbal skills to communicate empathy, elicit information regarding the patient’s preferences and provide basic information and an explanation of the diagnosis, prognosis and treatment plan.
2. Perform as an effective member of the patient care team, incorporating skills in inter-professional communication and collaboration including giving and receiving feedback.
3. Document and orally present new patient and follow up patient cases in a thorough and focused manner.

**Professionalism:**

1. Demonstrate a commitment to caring for all patients regardless of their medical diagnoses or social factors.
2. Exhibit teamwork and respect toward all members of the health care team, as manifested by reliability, responsibility, honesty, helpfulness, selflessness, and initiative in working with the team.
3. Demonstrate a positive attitude towards learning by showing intellectual curiosity, initiative, honesty, integrity, and dedication.

**2016-17 Internal Medicine Clerkship Learning Activity Objectives**

**CLINICAL ENCOUNTERS:**

**Inpatient Rotation**

1. Conduct an independent history and physical examination, adapting the scope and focus appropriately to the nature of the encounter (new vs. follow up) or complaint (complete vs. focused).
2. Demonstrate empathy in patient interactions and commitment to caring for all patients regardless of background.
3. Identify and prioritize problems with which a patient presents, appropriately synthesizing these into logical clinical syndromes.
4. Formulate a differential diagnosis based on the findings from the history and physical demonstrating clinical reasoning.
5. Apply differential diagnosis and probability based thinking to guide diagnostic test ordering, while considering test factors/characteristics, including their invasiveness, risks, benefits, limitations, and costs.
6. Interpret the results of commonly used diagnostic tests.
7. Formulate initial and daily therapeutic plan and explain the extent the plan is based on diagnostic reasoning and scientific evidence of effectiveness.
8. Document the history, physical examination, and assessment and plan in a format appropriate to the clinical situation (e.g. admission note vs. progress note)
9. Orally present a complete, well-organized summary of the patient’s history and physical examination findings, including an assessment and plan, modifying the presentation to fit the clinical situation.
10. Discuss medical information in terms understandable to patients and families while avoiding medical jargon and demonstrating appropriate skills to demonstrate empathy.
11. Demonstrate proficiency in specific physical exam and communication skills.
12. Observe the communication of life altering news to patients and families.
13. Identify members of the health care team and describe how they contribute to the patient’s care.
14. Participate in patient care teams demonstrating inter-professional communication skills including giving and receiving feedback and respect to all members of the healthcare team.
15. Demonstrate intellectual curiosity through identifying gaps in knowledge and skills and addressing these through independent information gathering and dissemination. (i.e. reading and discussing new information).

**DIDACTICS:**

**Required Topic Oriented Conferences/SIMPLE Cases**

**Cardiology**

*Acute Myocardial Infarction*

**Learning objectives:**

1. List the differential diagnosis of acute chest pain and narrow the differential based on specific physical exam findings.
2. Define and discuss the pathogenesis, signs, and symptoms of the acute coronary syndromes.
4. Develop an appropriate diagnostic and treatment plan—including recommended lifestyle modifications—for a patient presenting with acute coronary syndrome.

**Heart Failure**

**Learning objectives:**

1. Identify and translate auscultatory findings of the heart including rate, rhythm, S3/S4, and murmurs and interpret neck vein findings for jugular venous distension.
2. List the major pathologic states which cause dyspnea and compare the differing etiologies and signs of left-sided vs. right-sided heart failure.
3. Utilize the staging system for heart failure.
4. Discuss the factors leading to symptomatic exacerbation of HF, including ischemia, arrhythmias, anemia, hypertension, thyroid disorders, non-compliance with medications and dietary restrictions, and use of nonsteroidal anti-inflammatory drugs.

5. Recommend pharmacologic management of heart failure.

**Endocrinology**

**Hypoglycemia & DKA**

*Learning objectives:*

1. Diagnose type 2 diabetes mellitus using the four accepted criteria, as well as know the diagnostic criteria for impaired fasting glucose and impaired glucose tolerance and list ADA the targets for glycemic control.

2. Recognize precipitants and presenting symptoms and signs of HHS and diabetic ketoacidosis (DKA), as well as discuss the pathophysiology for the abnormal laboratory values of each.

3. Describe the basic management of diabetic ketoacidosis and nonketotic hyperglycemic states, including the similarities and differences in insulin therapy and fluid and electrolyte replacement.

**Gastroenterology**

**Abdominal Pain**

*Learning objectives:*

1. List symptoms and signs indicative of an acute/surgical abdomen.

2. Approximate a likelihood ratio of the common causes of abdominal pain based on pain pattern, the quadrant the pain is located and abdominal exam findings.

3. Generate a prioritized differential of the most important and likely causes of a patient’s abdominal pain and recognize specific history, physical exam, and laboratory findings that distinguish between the various conditions.

4. Recommend a basic management plan for diverticulitis.

**GI Bleeding**

*Learning objectives:*

1. Identify the common causes for and symptoms of upper and lower gastrointestinal blood loss, including recognizing the distinguishing features of each.

2. Examine the role of contributing factors in gastrointestinal bleeding such as Helicobacter pylori infection, non-steroidal anti-inflammatory drugs, alcohol, coagulopathies, and chronic liver disease.

3. Develop an appropriate evaluation and treatment plan for patients with a gastrointestinal bleed.

**Liver Disease**

*Learning objectives:*

1. Complete an appropriate history and physical exam for a patient with mildly abnormal liver function tests.

2. Know when to order laboratory tests for evaluation of liver disease and be able to interpret the results.

3. Differentiate common causes of liver disease from less common causes.
4. Identify physical exam findings associated with cirrhosis.
5. Advise a patient with liver disease about secondary prevention measures.

**Geriatrics**

*Delirium & Dementia*

**Learning objectives:**
1. Differentiate between delirium, dementia, and depression and identify the risk factors for developing these conditions.
2. Recognize the symptoms and signs of the most common and most serious causes of altered mental status, including: prescription and non-prescription drugs, illicit substances and metabolic causes.
3. Perform a thorough diagnostic evaluation of delirium and dementia.
4. Manage the most common causes of delirium.

**Hematology**

*Anemia*

**Learning objectives:**
1. Understand the meaning and utility of various components of the hemogram and identify morphologic changes on a peripheral smear to classify the anemia based on these indices/findings.
2. Use information regarding the diagnostic utility of the various tests for iron deficiency when selecting a lab evaluation for iron deficiency.
3. Identify key historical and physical exam findings in the anemic patient.
4. Develop a further evaluation and management plan for a patient with anemia.

**High Value Care**

**Learning objectives:**
1. Define High Value Care
2. Use validated decision support tools to increase accuracy and diagnostic efficiency.
3. Estimate the harms and costs associated with common tests.
4. Balance benefits with harms and costs of testing.

**Infectious Disease**

*Pneumonia*

**Learning objectives:**
1. List the common pneumonia pathogens in immunocompetent and immunocompromised hosts and describe radiographic findings.
2. Identify bronchial breath sounds, rales (crackles), rhonchi, and wheezes, signs of pulmonary consolidation, and pleural effusion on physical exam.
3. Recommend when to order diagnostic laboratory tests—including complete blood counts, sputum gram stain and culture, blood cultures, and arterial blood gases—how to interpret those tests, and how to recommend treatment based on these interpretations.
4. Select an appropriate empiric antibiotic regimen for community-acquired, nosocomial, immunocompromised-host, and aspiration pneumonia, taking into
account pertinent patient features.

5. Discuss the Centers for Medicare and Medicaid Services (CMS) and Joint Commission’s quality measures for smoking cessation advice and vaccination against pneumonia and influenza in patients with pneumonia and other pulmonary disorders.

**Sepsis**

*Learning objectives:*

1. Describe clinical presentation of sepsis syndromes.
2. Develop appropriate treatment plan for patients with fever including the selection of an initial, empiric treatment regimen for patients with life threatening sepsis.

**Nephrology**

**CKD**

*Learning objectives:*

1. Summarize CKD staging and list the most common causes of chronic kidney disease (CKD) and uremia and describe associated pathophysiology
2. Tell about the pathophysiology of hyperkalemia, hypocalcemia, and hyperphosphatemia in the setting of chronic kidney disease.
3. Appropriately recommend the use of ACE-Inhibitors and ARBs, calcium replacement and phosphate binders in the management of CKD.

**Fluid & Electrolytes and AKI**

*Learning objectives:*

1. Compare the pathophysiology of major etiologies of acute renal failure including decreased renal perfusion (pre-renal), intrinsic renal disease, and acute renal obstruction (post renal).
2. Calculate fractional excretion of sodium and apply it to distinguish between pre-renal and intrinsic renal disease.
3. Develop appropriate initial management plan for acute renal failure including volume management, dietary recommendations, drug dosage alterations, electrolyte monitoring, and indications of dialysis.
4. Interpret a urinalysis, including microscopic examination for casts, red blood cells, white blood cells, and crystals.
5. Calculate the anion gap and generate a differential diagnosis for metabolic acidosis.

**Oncology**

**Lung, Breast, Colon and Rectal Cancer**

*Learning objectives:*

1. List the three most common causes of cancer death in U.S. adults.
2. List the common risk factors for lung, colorectal and breast cancer.
3. Describe the screening guidelines for lung, colorectal and breast cancer.
4. Understand the difference between cancer therapies based on intent of treatment.
5. Understand the difference between palliative chemotherapy and palliative care.
Pulmonary

**Pleural Effusions**

*Learning objectives:*
1. Describe the common causes of tachypnea.
2. List indications for thoracentesis and know laboratory findings of transudative and exudative effusions.

**Venous Thromboembolism**

*Learning objectives:*
1. List risk factors for the development of a deep vein thrombosis (DVT).
2. Recognize the signs and symptoms of DVT and pulmonary embolism (PE).
3. Generate a prioritized differential diagnosis of DVT/PE based on specific physical findings using pre-test probability tools.
4. Develop an appropriate management plan for DVT/PE.

Rheumatology

**Arthritis**

*Learning objectives:*
1. Know the approach to patients with possible rheumatologic disease.
2. Know typical clinical and laboratory findings of rheumatoid arthritis, systemic lupus erythematosus (SLE), dermatomyositis, and systemic vasculitis.
3. Compare and contrast the various causes of inflammatory polyarthritis.

Other Requirements:

**Interprofessional Teamwork Analysis**

1. Assess the function of the interdisciplinary team you observed, comparing that with known characteristics of a good team.
2. Identify one area where the team could improve their function.

**High Value Care Analysis**

1. Analyze the use and costs of tests and procedures for inpatients.
2. Develop a cost reduction strategy for future practice.
2016-17 Neuroscience Clerkship Overarching Goals

Knowledge for Practice
1. Explain the neuroanatomical basis for symptom complexes.
2. Recognize 10 specific neurological emergencies: increased intracranial pressure, delirium/encephalopathy, intracranial hemorrhage, meningitis, seizure/status epilepticus, stroke, spinal cord compression, concussion, neuromuscular respiratory failure.
3. Recognize 12 specific diagnoses: stroke, seizure, dementia, movement disorder (Parkinsons), headache/migraine, tremor, multiple sclerosis, Bell’s palsy, carpal tunnel syndrome, polyneuropathy, radiculopathy, and brain death.

Problem Solving and Clinical Skills/Patient Care
   Perform in role expected for level of training in the care of a patient with the following: Paroxysmal neurological disorder; Neurodegenerative condition; Peripheral nerve condition
   1. Demonstrate the ability to conduct an interview and obtain a history of a patient with a neurological condition.
   2. Explain the elements of the neurological exam and demonstrate the ability to perform this exam.
   3. Discuss the findings for the history and exam to formulate an anatomical localization to explain patient symptoms.
   5. Describe the appropriate use of neuro-diagnostic tests.
   6. Discuss the management plans for different neurological conditions.

Practice Based Learning and Improvement
1. Develop clinical questions regarding care of the patient with a neurologic condition.
2. Cite published guidelines for a neurological condition.
3. Use self-assessment to identify limitations in medical knowledge in field of neurology.

Systems Based Practice
1. Discuss patient social and community factors that impact rehabilitation.
2. Discuss the economic impact of a particular neurological condition.
3. Discuss barriers that patients have for adherence to care plan.
4. Explain the roles of the interprofessional team members involved in caring for patients with neurological conditions.

Interpersonal and Communication Skills
1. Demonstrate interpersonal and communication skills needed to interact with patients, medical staff, the treatment team, and peers.
2. Use medical information as a documentation in a manner that provides an accurate record regarding the patient condition.
3. Perform organized and concise written and oral presentations with reliable information.

**Professionalism**

1. Demonstrate an awareness of the meaning of professional conduct.
2. Explain an ability to seek, and an openness to, feedback from faculty, staff, and patients.
3. Demonstrate an adherence to institutional and clerkship policies.
4. Exhibit an ability to maintain patient confidentiality.
5. Exhibit respect for the patient with a neurological disability.
2016-17 Neuroscience Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

Bedside Teaching w/ Neurology Resident
1. Perform a neurological exam.
2. Explain physical exam findings.
3. Obtain feedback on neurological exam skills.

Neurology Morning Report
1. Describe the neurological condition presented and the pertinent clinical questions that arose.

Short Call w/ Neurology Resident
1. Conduct a history and physical exam on a new patient in a consult/acute care situation.
2. Discuss the patient's findings with a resident or faculty physician.
3. Develop a localization and differential diagnoses of the patient.
4. Complete an initial work up for the patient.
5. Describe the initial treatment and management plan.
6. Explain the admission process of a patient with a neurological condition seen in an acute care setting.
7. Describe the role of the neurologist in a consult/acute care situation.

Clinical Experience-Outpatient
1. Learn about patients with a wide variety of neurological conditions.
2. Describe the wide variety of adult and pediatric neurological conditions encountered in an ambulatory setting.
3. Discuss the history, examination findings, differential diagnosis of a patient with a paroxysmal neurological disorder (examples include: vascular, seizure, dizziness).
4. Discuss the history, examination findings, differential diagnosis of a patient with a neurodegenerative condition (examples include: dementia, multiple sclerosis, Parkinson's disease).
5. Perform an observed mental status examination.
6. Perform an observed cranial nerve examination.
7. Perform an observed motor function examination.
8. Perform an observed reflexes examination.
9. Perform an observed sensation examination.
10. Perform an observed screening neurological examination.
11. Communicate in a concise manner with faculty and with patient and family in an outpatient setting.
**Clinical Experience-Inpatient**

**NEW PATIENT**
1. Recognize neurologic emergencies and be able to provide initial management and triage.
2. Obtain a history and conduct a physical examination of an acute new patient.
3. Present a well-organized history, neurological examination, lab results and imaging findings for a new patient.
4. Develop a localization and differential diagnoses of the patient.

**FOLLOW-UP OR DAILY PATIENT**
1. Independently perform an interval history and neurological examination on a daily basis.
2. Report diagnostic test findings for follow-up patients to the team in a timely and reliable fashion.
3. Identify complications that may occur in patients that are followed.
5. Discuss the history, examination findings, differential diagnosis of a patient with a paroxysmal neurological disorder (examples include: vascular, seizure, dizziness).
6. Discuss the history, examination findings, differential diagnosis of a patient with a neurodegenerative condition (examples include: dementia, multiple sclerosis, Parkinson’s disease).
7. Discuss the history, examination findings, differential diagnosis of a patient with a peripheral nerve condition.
8. Perform an observed mental status examination.
9. Perform an observed cranial nerve examination.
10. Perform an observed motor function examination.
11. Perform an observed reflexes examination.
12. Perform an observed sensation examination.
13. Perform an observed screening neurological examination.
14. Describe the different roles in the inpatient treatment team, including social workers, case managers, physical therapy, occupational therapy, speech therapy, pharmacists, and nursing.
15. Communicate effectively with the medical team, the patient and patient’s family.

**DIDACTICS**

**Clerkship Orientation**
1. Identify gaps in knowledge base pertaining to clinical neuroscience.
2. Demonstrate the neurological exam under the supervision of a neurologist.
3. Explain the role of neurology, neurosurgery, neuroradiology, and neuro-rehabilitation medicine in the study of clinical neuroscience.
Lectures
Localization
1. Identify the longitudinal segments of the nervous system (cortex, sub cortex, brain stem, spinal cord, nerve root, plexus, peripheral nerve, neuromuscular junction, muscle).
2. Describe the pattern of weakness seen with a lesion in each segment.
3. Describe other associated symptoms observed with a lesion in each segment.
4. List medical terms for conditions in each segment of the nervous system.
5. Identify conditions that can affect the corticospinal tract.

Epilepsy
1. Define epilepsy in both medical and in lay terms.
2. Identify elements of a history, including risk factors that suggest epilepsy as a diagnosis.
3. Compare partial and generalized seizures.
4. Describe mimics of seizure.
5. Discuss seizure work-up (MRI and EEG).
6. Discuss an epilepsy syndrome including genetic links to a syndrome.
7. Discuss anti-epileptic drug treatment, including status epilepticus treatment.

Stroke
1. Define stroke, in both medical and lay terms.
2. Compare stroke with seizure and other stroke mimics.
3. Describe symptoms of hemispheric, subcortical, and brain stem stroke.
4. Identify vascular risk factors and modification.
5. Discuss risk stratification of TIA.
6. Discuss treatment of acute ischemic stroke.

Movement Disorders
1. Define tremor and identify mimics of tremor.
2. Define Parkinsonism and differentiate from Parkinson's Disease.
3. Identify symptoms of Parkinson's Disease.
4. List mimics of Parkinson's Disease, including iatrogenic causes of Parkinsonism.
5. Compare Parkinson's Disease and essential tremor.
6. Discuss treatment of Parkinson's Disease including chronic treatment effects.

Multiple Sclerosis
1. Define clinical features of multiple sclerosis.
2. Identify an epidemiological factor in multiple sclerosis.
3. Discuss a clinically isolated syndrome (optic neuritis, transverse myelitis).
4. Define risk of multiple sclerosis with a clinically isolated syndrome.
5. Categorize different types of multiple sclerosis.
6. Discuss workup and McDonald criteria.
Pediatric Neurology
1. Identify meningitis triad.
2. Discuss work-up of meningitis and CSF analysis.
3. Define cerebral palsy.
4. Explain risk factors for cerebral palsy.
5. Discuss long term issues with cerebral palsy.
6. Describe a pediatric neurological syndrome.

Neurosurgical Emergencies & Increased ICP (intracranial pressure)
1. Identify contents of cranium.
2. Explain signs and symptoms of elevated ICP.
3. List causes of elevated ICP.
4. Describe methods used for monitoring ICP.

Intracranial Hemorrhage
1. Recognize the anatomy and pathophysiology of intracranial hemorrhage clinical presentations.
2. Describe the causes of clinical deterioration, and the initial management based on the pathophysiology of the patient's decline.
3. Discuss treatment options for hemorrhagic stroke.

Concussion
1. Define concussion.
2. Describe how to diagnose concussion.
3. Discuss the initial management of concussion.
4. Explain return-to-play guidelines.
5. Describe acute and chronic sequelae of concussion, including second impact syndrome, post-concussion syndrome and chronic traumatic encephalopathy.

Radiculopathy and Spinal Cord Compression
1. Identify symptoms of radiculopathy.
2. Describe the anatomy of cervical and lumbar radiculopathy.
3. Describe the first line therapy of radiculopathy.
4. Explain the role of imaging and electrodiagnostic testing.
5. List signs and symptoms of spinal cord compression.
6. Identify a spinal cord syndrome and its anatomical basis.

Neocritical Emergencies
1. Discuss a patient complaint of headache with appropriate questioning, physical exam findings, and initial treatment.
2. Identify radiographically (by CT scan) an acute intracranial hemorrhage.
3. Identify by MRI in conjunction with clinical picture posterior reversible encephalopathy syndrome.
4. Identify a seizure and recall appropriate initial management.
Neuropsychology
1. Identify the role of the neuropsychologist within the multidisciplinary team and demonstrate when a neuropsychological evaluation is warranted to characterize behavioral and cognitive changes resulting from central nervous system disease or injury.
2. Make meaning of neuropsychological reports in regard to the domains being reported and apply recommendations.
3. Analyze results from cognitive screeners frequently used (i.e., MoCA, MMSE) by medical students and evaluate when a neuropsychological evaluation is the next step in the assessment process.
4. Demonstrate the role of Health Psychology within the multidisciplinary team, consider the challenges patients face, and recognize when a consultation is needed.
5. Compare the services of Neuropsychology and Health Psychology and make appropriate referrals.
6. Explain to patients/families the roles of the neuropsychologist and health psychologist and what to expect during an evaluation.

OTHER REQUIREMENTS
Faculty Observed History and Exam in a Structured Setting
1. Interview a patient with a paroxysmal neurological disorder
2. Demonstrate the use of open ended questions with a transition to focused questions during interview
3. Perform a neurological exam
4. Communicate findings, diagnosis, work-up, and treatment plan to the patient
5. Describe initial interventions for acute stroke, TIA, first seizure, acute neuromuscular weakness.
6. Apply findings of the neurological evaluation to counsel patient on work and/or driving restrictions. Driving restriction should recognize Wisconsin law.

Neurology Grand Rounds
1. Explain the role of Grand Rounds in the professional development of faculty and residents.
2. Identify the gaps in knowledge and practice addressed during Grand Rounds.

Teaching Conference with Inpatient General Attending/Case Presentation
1. Present history and physical exam findings through written and oral presentations.
2. Review the literature on a neurological condition and present written summary to peers.
3. Accept faculty and peer feedback in a group setting.

Neuroradiology Teaching Conference/Case Presentation Didactics
1. Identify the difference between CT and MRI scans of the brain and spine.
2. Explain the differences between "soft tissue" and "bone windows" on CT.
3. Identify the basic sequences on MRI (T1, T2, FLAIR, DWI and T1 post contrast).
4. Describe the most common indications for CT and MRI in brain and spine imaging.
5. Discuss the indications for contrast for brain and spine imaging.
6. Identify important anatomic structures of the brain and spine (specific anatomic structures are listed under the anatomy section).
7. Identify basic patterns of disease on imaging:
   - Intracranial hemorrhage: epidural, subdural, subarachnoid, intraparenchymal
   - Stroke
   - Tumor
   - Infection: Herpes, Abscess, Meningitis
   - Multiple Sclerosis
8. Describe imaging modalities.
9. Present a case with pertinent imaging findings.

**Neuro-Rehab Teaching Conference/Case Presentation**

1. Identify the roles of occupational/physical/speech therapy and the multidisciplinary rehabilitation team in treating people with disabling conditions in an acute care setting.
2. Describe the rehabilitation framework of disease, functional impairment, activity limitation and barriers to social participation in approaching neurologic problems.
3. Explain the management of medical issues and how they affect the functional status of patients.

**Case Presentation**

1. Present findings of history and physical exam through an oral presentation, including providing evidence of a review of the literature.
2. Describe why the patient will benefit from acute inpatient level rehabilitation.
3. Describe the functional impairment of the patient and how therapeutic goals are set up in order for the patient to return home.

**Evidence-based Medicine Project**

1. Formulate clinical questions based on the following factors: patient, intervention, comparison, and outcome.
2. Discuss methods to provide clinically relevant answers to clinical questions.
2016-17 Ob-Gyn Clerkship Overarching Goals

Knowledge for Practice
1. Demonstrate knowledge of the physiology of the female pelvic anatomy with an emphasis on reproductive development and changes in endocrinology across a woman's lifespan.
2. Acquire a comprehensive understanding of primary and preventive care for women across the lifespan with appropriate screening tests, exams, and treatments at each stage.
3. Develop an evidenced-based understanding of the pathophysiology of conditions and common disorders that affect women, tests to diagnose, and the appropriate management options for these conditions.
4. Describe the course of a normal pregnancy and effective healthcare during pregnancy to ensure the health of the mother and fetus.
5. Discuss the proper management of labor and delivery and the management of common medical complications that occur during and after pregnancy.
6. Recognize common obstetric and gynecological surgical procedures in terms of patient selection, pre-operative concerns, and the risks and benefits for each procedure.

Problem Solving and Clinical Skills/Patient Care
1. Take an effective history and physical, develop a differential diagnosis, and develop a management plan for common disorders and conditions.
2. Provide appropriate assistance in the OR for gynecological surgeries and C-sections.
3. Evaluate surgical patients pre-operatively and post-operatively in terms of common complications and explain proper management of these complications.
4. Discuss how to provide non-directive counseling to patients regarding pregnancy options and various methods of contraception with their benefits and risks.
5. Assess the health of the mother and fetus health during pregnancy and labor and demonstrate the proper technique for delivering the baby.

Lifelong Learning / Practice Based Learning and Improvement
1. Use evidence-based resources to better understand the condition and treatment of patients under your care.
2. Improve performance based on instructional feedback from the faculty, residents, and healthcare.
3. Reflect on your performance as a medical student and identify individual learning goals to accelerate your development as a physician.

Systems Based Practice
1. Know and utilize hospital and community resources to support quality patient care.
2. Describe how multiple systems - hospitals, insurance carriers, government agencies - intersect in the clinical setting to impact patient care.
3. Identify the major public health issues impacting women's health care today.
4. Recognize the effect social and cultural factors have on the provision of quality patient care.
5. Demonstrate the ability to be an effective team member by assuming an appropriate role in any clinical situation in order to support quality patient care.

**Interpersonal and Communication Skills**
1. Contribute to effective teamwork by communicating with the healthcare team in a timely, thorough, and accurate manner.
2. Document patient information with logically organized, concise, accurate written notes.
3. Develop patient-centered communication skills to effectively convey healthcare information to patients.
4. Use a respectful non-aggressive manner in counseling patients regarding life style choices that contribute to optimal health.

**Professionalism**
1. Accomplish tasks in a way that demonstrates that patient well-being is always paramount.
2. Demonstrate professionalism by interacting respectfully with the healthcare team, patients and families regardless of differing beliefs, culture or status.
3. In developing management plans for patients consider the physical, emotional, social and financial costs that the condition and its treatment impose on the patient.
4. Take responsibility for accomplishing assigned tasks in an effective and punctual manner.
5. Demonstrate trustworthiness by maintaining patient confidentiality at all times.
2016-17 OB/Gyn Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

OUTPATIENT

Well-Woman Care (routine preventive healthcare)

1. Elicit a comprehensive history (menstrual, obstetric, gynecologic, contraceptive, sexual, family and social), perform a well woman exam (with pelvic and breast exam), and recommend screening adhering to the primary preventative care standards established by ACOG.

2. List and describe age-appropriate screening procedures and appropriate time intervals for these tests: a. mammogram b. bone density c. Pap tests d. sexually transmitted infections

3. Demonstrate the ability to counsel patients in a non-directive manner on the following methods of contraception, their mechanism of action, and the risk associated with each: a. natural family planning b. barrier methods c. oral contraceptives d. emergency contraception e. LARC methods f. permanent contraception

4. Demonstrate how to perform a comprehensive breast exam and discuss the diagnostic approach to a woman with the chief complaint of breast mass, nipple discharge or breast pain.

5. Explain the identification and appropriate management of menopausal and peri-menopausal symptoms.

6. Assess patient risk for the following after reviewing their history: a. unintended pregnancy b. STIs c. cervical pathology d. breast malignancy e. gynecologic malignancies f. domestic violence

Obstetrics Outpatient

1. Participate in a first prenatal visit observing the taking of a history, physical exam, pelvic exam, determination of due date and lifestyle counseling.

2. Analyze prenatal patient vitals and laboratory assessments.

3. Describe how to diagnose a pregnancy and assess gestational age.

4. Demonstrate appropriate counseling for pregnant patients or those considering pregnancy regarding the effects of the following on pregnancy: a. substance abuse b. medications c. environmental hazards
5. Describe common symptoms, clinical manifestations and management of the following obstetric complications:
   a. second-trimester loss
   b. preterm labor
   c. third trimester bleeding
   d. hypertension
   e. GDM
   f. multiple gestation
   g. IUGR
   h. post-term pregnancy
   i. fetal death

6. Participate in the care of high risk obstetric patients and be able to discuss the use of integrated care resources in the high risk obstetrics setting.

7. Discuss the maternal physiologic anatomic changes associated with pregnancy.

8. List the normal anatomic and physiologic changes to the breast during pregnancy and postpartum periods and the benefits of breastfeeding to mother and newborn.

9. Perform and interpret the following methods of fetal monitoring:
   a. intermittent auscultation
   b. electronic monitoring
   c. fetal scalp stimulation
   d. vibroacoustic stimulation
   e. non stress test
   f. biophysical profile

10. Explain the management for the following medical and surgical conditions in pregnancy:
    a. anemia
    b. diabetes mellitus
    c. chronic hypertension
    d. urinary tract disorders
    e. TORCH infections
    f. Group B Streptococcus
    g. HIV
    h. asthma
    i. DVT
    j. alcohol, tobacco, drugs
    k. appendicitis
    l. pneumonia

**Gynecology Outpatient**

1. Participate/observe in a pertinent history, a focused physical examination, select and interpret diagnostic tests and establish an initial treatment plan for some/all of the following conditions:
   a. sexually transmitted infections
   b. vaginitis
   c. amenorrhea
   d. pelvic pain
   e. breast mass
   f. abnormal uterine bleeding
   g. uterine fibroids
   h. galactorrhea

2. Explain the etiologies of abnormal menstrual bleeding as well as its diagnosis and management.

3. Identify the risk factors for cervical neoplasia and discuss the management of an abnormal Pap smear and appropriate follow-up for patients with that finding.

4. Interpret abnormal Pap smear results and establish a treatment plan in accordance with the latest ASCCP guidelines.
5. Compare the characteristics of functional cysts, benign ovarian neoplasm and ovarian malignancies.
6. Describe the pathophysiology, diagnosis and management of urinary tract infections.
7. Differentiate stress, urge and mixed urinary incontinence using history, physical exam, and test results.
8. Describe the most common dermatologic disorders of the vulva and their evaluation and treatment a. including:
   a. vulvovaginitis
   b. herpes simplex virus
   c. lichen planus
   d. lichen sclerosis
   e. vulvar neoplasia
9. Analyze accurately patient vitals and laboratory assessments.
10. Perform and interpret the results of tests to confirm the diagnosis of vaginal infections including:
    a. vaginal pH
    b. saline and potassium
    c. hydroxide microscopy
    d. bacterial and viral culture.
11. As part of the patient care team participate/observe in the history, physical exam, and management of women with one of these gynecologic cancers:
    a. cervical
    b. endometrial
    c. vulvar
    d. ovarian
12. Demonstrate via patient discussions the different modalities of aneuploidy screening including:
    a. first trimester screen
    b. free fetal DNA analysis
    c. amniocentesis
    d. quadruple screening versus definitive testing via chorionic villus sampling

**INPATIENT**

**Obstetrics Inpatient**
1. List the signs and symptoms of pre-labor contractions and labor contractions.
2. Describe the cardinal movements of labor and the steps of performing a vaginal delivery.
3. Describe the stages of labor and recognize common abnormalities including:
   a. prolonged latent phase
   b. arrest of dilation
   c. protracted descent
   d. arrest of descent
4. Discuss indications for and potential risks associated with cesarean delivery.
5. Elicit an accurate history, and assist in the performance of a focused exam and development of a treatment plan for term patients presenting with:
   a. labor concerns
   b. ROM
   c. vaginal bleeding
   d. decreased fetal movement
6. Demonstrate respect for the patient by respecting her preferences in the care of the infant and mother immediately after delivery.
7. During delivery demonstrate proper self-positioning, delivery technique, and handling of baby after delivery.
8. Describe the causes and management of postpartum hemorrhage including delayed hemorrhage.
9. Perform a focused postpartum exam, and participate in the counseling of patients regarding contraception, future pregnancies and breast feeding.
10. Be able to identify and explain treatment for the most common maternal complications including:
   a. mastitis
   b. perineal discomfort
   c. wound infection
   d. postpartum depression.

**Gynecology Inpatient**

1. Perform a pertinent history, assist in a focused physical examination, the selection and interpretation of diagnostic tests and the initial treatment plan for common presenting patient complaints including:
   a. abdominal pain
   b. vaginal bleeding
   c. pelvic mass
   d. urologic/gynecologic infections
   e. vulvar/vaginal symptoms
2. Describe pre-operative indications for and explain the basic procedure and the potential intra and post-operative complications for:
   a. dilatation and sharp/suction curettage
   b. diagnostic and simple operative hysteroscopy
   c. diagnostic and simple operative laparoscopy
   d. open versus vaginal hysterectomy
   e. excision of vulvar lesions
   f. sterilization procedures
3. Meet patients prior to surgery and review their history and physical, when advised by supervisors.
4. Describe the anatomy of the anterior abdominal wall, pros and cons of surgical incisions, and use of pre and post incision anesthesia.
5. Describe the anatomy of the pelvis including:
   a. arterial blood supply
   b. venous and lymphatic drainage
   c. neurologic innervation
   d. anatomic relationship between reproductive organs and the non-gynecologic abdominal viscera
6. Evaluate patients and develop treatment plans for post-operative complications including:
   a. Fever
   b. bleeding
   c. pain control
   d. ileus/obstruction
   e. nausea
   f. wound complications
   g. infection
   h. cardiovascular symptoms
   i. change in mental status
   j. renal/fluid balance issues
   k. respiratory symptoms
   l. thromboembolism
7. Analyze accurately patient vitals and laboratory assessments.

**ROUNDING**
1. Perform appropriate pre-rounding assessment of patients.
2. Analyze patient vitals and laboratory assessments.
3. Present patients to healthcare team in a well-organized manner during morning board report, highlighting pertinent positives and negatives.
4. Present and appropriately prioritize differential diagnosis for patients and develop a postpartum or post-surgery management plan.

**CASE-BASED INSTRUCTION**

**Faculty Directed Case-Based Instruction** (assigned relevant to current case)
1. Describe an understanding of the patient condition and case context by explaining appropriate management options.
2. Discuss the pathophysiology, diagnosis, management and public health implications by leading an evidence-based discussion of the assigned case.
3. Present findings and management plan with evidenced based support from the literature.

**Student Led Case-Based Instruction**
1. Cite respected sources of evidenced-based information in the field of obstetrics and gynecology.
2. Discuss the pathophysiology in the presented case and describe the proper diagnosis, management, and treatment options for the patient.
3. Capture the essential elements of a patient management plan and communicate the plan clearly, concisely, and thoroughly to the healthcare team.
4. Respond effectively to follow up questions by fellow students and the supervising faculty member.

**CONFERENCES**

**M&M and Grand Rounds**
1. Identify important evidence-based resources in Obstetrics and Gynecology.
2. Analyze factors contributing to clinical and surgical errors and poor patient outcomes.
3. Describe systems-based factors that lead to sub-optimal patient care and note successful interventions.
Reflections on Clinical Practice – Interprofessional Collaborative Healthcare

In the context of a clinical scenario in which you participated:
Discuss effective/ineffective interprofessional teamwork and how that impacted health care.

1. Examine personal attitudes and beliefs that facilitate or hinder your ability to provide effective inter-professional healthcare.
2. Identify areas for your clinical development regarding interprofessional interactions and develop an improvement plan.
3. Discuss the roles of providers from various professions in caring for patients on Labor and Delivery or ambulatory care.
4. Identify possible barriers to effective communication among providers in different professions as they care for a post-surgical patient.

CLERKSHIP ORIENTATION: Lectures

Basics of Labor & Delivery
1. Define the medical student’s role at a delivery and a C-section.
2. Describe the basics of labor evaluation and how to complete a cervical assessment.
3. Explain the stages of normal labor.
4. Explain the proper delivery technique in a standard birth.

Introduction to Gynecology
1. List the four age categories of women patients and explain the major health concerns for each category.
2. Describe the process of proper breast cancer screening.
3. Discuss the etiology and treatment of abnormal uterine bleeding.
4. Discuss the diagnosis and treatment of patients with the human papilloma virus.

Basics of Fetal Heart Tracings
1. Explain the ACOG categories for fetal heart tracings.
2. Discuss the normal parameters of the fetal heart strip and how the readings relate to labor
3. Identify accelerations and decelerations on the fetal heart strip and explain their significance relating to fetal health and the labor process
CLERKSHIP ORIENTATION: Simulation Stations

Labor & Delivery Simulation
1. Explain the medical student’s role in the labor and delivery room.
2. Describe the 7 cardinal movements of labor.
3. Demonstrate proper delivery technique, traction, and handling of infant after delivery.
4. Discuss cultural sensitivity to family preferences regarding the post-delivery handling of the infant and care for the mother.

Pelvic Exam Simulation
1. Demonstrate proper positioning and draping of the patient.
2. Demonstrate proper technique of an effective pelvic exam.
3. Explain how to reposition the patient and handle the equipment after the exam.
4. Describe a proper explanation of exam results to the patient.

CORE CASE DISCUSSIONS

Ectopic Pregnancy
1. Develop a differential diagnosis for vaginal bleeding and abdominal pain in the first trimester.
2. Perform a physical exam to assess for acute abdomen.
3. List risk factors for ectopic pregnancy.
4. Discuss diagnostic protocols for ectopic pregnancy.
5. Describe treatment options for patients with ectopic pregnancy.

Spontaneous Abortion
1. Develop a differential diagnosis for first trimester vaginal bleeding.
2. Differentiate the types of spontaneous abortion (missed, complete, incomplete, threatened, septic).
3. List the causes of spontaneous abortion.
4. List the complications of spontaneous abortion.
5. Discuss treatment options for spontaneous abortion.

Third Trimester Bleeding
1. List the causes of third trimester bleeding.
2. Describe the initial evaluation of a patient with third trimester bleeding.
3. Differentiate the signs and symptoms of third trimester bleeding.
4. List the maternal and fetal complications of placental previa and abruption placenta.
5. Describe the initial evaluation and management plan for acute blood loss.
6. List the indications and potential complications of blood product transfusion.

**Sexually Transmitted Infections & Urinary Tract Infections**
1. Describe the guidelines for STI screening and partner notification/treatment.
2. Describe STI prevention strategies, including immunization.
3. Describe the symptoms and physical exam findings associated with common STIs.
4. Discuss the steps in the evaluation and management of common STIs including appropriate referral.
5. Describe the pathophysiology of salpingitis and pelvic inflammatory disease.
6. Describe the evaluation, diagnostic criteria and initial management of salpingitis/pelvic inflammatory disease.
7. Identify possible long-term sequelae of salpingitis/pelvic inflammatory disease.
8. Describe the diagnosis and management of UTIs.

**Endometriosis**
1. Describe theories of the pathogenesis of endometriosis.
2. List the most common sites of endometriosis.
3. Describe the symptoms and physical examination findings in a patient with endometriosis.
4. Describe the diagnosis and management options of endometriosis.

**Disorders of the Breast**
1. List factors that place individuals at risk for breast disorders.
2. Describe symptoms and physical examination finding of benign or malignant conditions of the breast.
3. Demonstrate the performance of a clinical breast examination.
4. Discuss the steps in the evaluation of common breast complaints: mastalgia, mass, nipple discharge.
5. Discuss initial management options for benign and malignant conditions of the breast.

**Amenorrhea**
1. Define amenorrhea and oligomenorrhea.
2. Explain the pathophysiology and identify the etiologies of amenorrhea and oligomenorrhea, including possible nutritional causes.
3. Describe associated symptoms and physical examination findings of amenorrhea.
4. Discuss the steps in the evaluation and initial management of amenorrhea and oligomenorrhea.
5. Describe the consequences of untreated amenorrhea and oligomenorrhea.
Normal and Abnormal Uterine Bleeding
1. Define the normal menstrual cycle and describe its endocrinology and physiology.
2. Define abnormal uterine bleeding.
3. Describe the pathophysiology and identify etiologies of abnormal uterine bleeding.
4. Describe the steps in the evaluation and initial management of abnormal uterine bleeding.
5. Summarize medical and surgical management options for patients with abnormal uterine bleeding.

Menopause
1. Define menopause and describe changes in the hypothalamic-pituitary-ovarian axis associated with perimenopause/menopause.
2. Describe symptoms and physical exam findings related to perimenopause/menopause.
3. Discuss management options for patients with perimenopause/menopausal symptoms.
4. Counsel patients regarding the menopausal transition.
5. Discuss long-term changes associated with menopause.

Uterine Leiomyoma
1. Cite the prevalence of uterine leiomyoma.
2. Identify symptoms and physical findings in patients with uterine leiomyoma.
3. Describe the diagnostic methods to confirm uterine leiomyomas.
4. Describe the management options for the treatment of uterine leiomyomas.

Sexual Assault
1. Identify patients at increased risk for sexual assault.
2. Describe the medical and psychosocial management of a victim of sexual assault.

Intimate Partner Violence
1. Cite prevalence and incidence of violence against women, elder abuse, and child abuse.
2. Screen a patient for intimate partner violence.
3. Summarize the available resources for a victim of intimate partner violence including short-term safety.
2016-17 Pediatric Clerkship Overarching Goals

Knowledge for Practice

1. Apply knowledge of pathophysiology and epidemiology by managing common acute and chronic pediatric illnesses and disabilities.
2. Differentiate between normal and abnormal physical growth and intellectual, social and motor development in children.
3. Recommend appropriate components of a health supervision visit, including immunizations and screening tests, based on age.

Problem Solving and Clinical Skills/Patient Care

1. Adapt the medical interview to obtain a complete medical history with children and/or their families, from birth to 21 years of age.
2. Conduct a complete pediatric physical exam appropriate to the nature of the visit or complaint.
3. Document the history, physical exam, and assessment and plan using an organized format appropriate to the clinical situation (e.g. inpatient admission note, progress note, acute illness visit, health supervision visit).
4. Develop age appropriate differential diagnoses, clinical assessments and management plans for common acute pediatric illnesses.
5. Interpret the results of basic diagnostic tests, recognizing the age appropriate values.
6. Assume responsibility for the initial and follow up care of the patient under the supervision of residents and faculty.

Practice Based Learning and Improvement

1. Establish a pattern of continuous inquiry into the problems of human health and development, referring to basic texts and current literature.
2. Access relevant clinical information using electronic databases and critically appraise the information obtained to make evidence-based decisions regarding the care of your patients.

Systems Based Practice

1. Develop an understanding of the child and families’ perspectives of being cared for within our health care system.
2. Discuss the impact of social, cultural and environmental factors on the health of young people.
3. Describe the importance of access to and common barriers to medical care as a determinant of health.
4. Describe the role and responsibility of physicians in linking children and their families with community resources and the services offered by those resources.
Interpersonal and Communication Skills

1. Demonstrate effective and comfortable verbal and non-verbal communication skills with children and their families.
2. Present a complete, well-organized verbal summary of the patient’s history and physical examination findings, including an assessment and plan, modifying the presentation to fit the time constraints and educational goals of the setting.
3. Effectively communicate information about the diagnosis and plan to the health care team.
4. Effectively communicate information about the diagnosis and plan to the family and assess the families’ understanding of this information.

Professionalism

1. Demonstrate the development of humanistic attitudes in dealing with well, acutely ill, and chronically ill pediatric patients and their families.
2. Approach your education positively by showing intellectual curiosity, initiative, honesty, integrity, responsibility, maturity in soliciting, accepting, and acting on feedback, dedication to being prepared and reliability in all clinical and educational settings.
3. Communicate with patients and families respectfully, compassionately, sensitively and with an integrity and flexibility.
2016-17 Pediatric Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

Inpatient Rotation

1. Conduct a pediatric history and physical examination appropriate to the nature of the visit (initial vs. follow up) or complaint (complete vs. focused) and age of the patient.
2. Identify signs of acute and chronic illness in a neonate, infant, toddler, school aged child, and adolescent as evidenced by skin color, respiration, hydration, mental status, cry and social interaction.
3. Identify variations in vital signs based on the age of the patient, the presence or absence of disease, and testing modalities (e.g. rectal vs axillary temperature).
4. Discuss medical information in terms understandable to patients and families while avoiding medical jargon.
5. Observe the communication of life altering news to parents, children and adolescents.
6. Document the history, physical examination, and assessment and plan in a format appropriate to the clinical situation (e.g. admission note vs progress note)
7. Propose appropriate admission and daily orders for a hospitalized patient.
8. Present a complete, well-organized verbal summary of the patient’s history and physical examination findings, including an assessment and plan, modifying the presentation to fit the clinical situation (e.g. admission vs progress vs family centered rounds).
9. Outline a stepwise diagnostic plan based on the presentation of the patient and the severity of the presenting conditions.
10. Justify diagnostic tests and procedures taking into account their invasiveness, risks, benefits, limitations, and costs.
11. Interpret the results of commonly used laboratory tests including the CBC, urinalysis, CSF analysis, and serum electrolytes.
12. Describe the appropriate use of the following common medications in the inpatient setting, including when it is NOT appropriate to treat with these medications:
   a. analgesics
   b. antipyretics
   c. antibiotics
   d. bronchodilators
   e. corticosteroids
   f. intravenous fluids
13. Select generally accepted pharmacologic therapy for common conditions seen in the hospitalized patient including:
   a. asthma
   b. sepsis
   c. meningitis
   d. Pneumonia
   e. urinary tract infections
f. status epilepticus

14. Describe the conditions in which fluid administration may need to be restricted or increased and choose an appropriate intravenous fluid for a given condition.

15. Describe the causes and consequences of fluid imbalances and electrolyte disturbances leading to dehydration and such conditions as hypernatremia, hyponatremia, hyperkalemia, hypokalemia, and severe acidosis.

16. Calculate the fluid therapy for a child with severe dehydration to include “rescue” fluid to replenish circulating volume and ongoing maintenance needs.

17. Describe “red flags” for non-accidental trauma and the inpatient work up of child abuse.

18. Identify members of the health care team and describe how they contribute to the hospitalized child’s care (e.g. pharmacist, respiratory therapist, child life, etc).

**Outpatient Rotation**

1. Conduct a pediatric history and physical examination appropriate to the nature of the visit or complaint and age of the patient.

2. Accurately interpret height (length), weight and head circumference on age appropriate growth curves.

3. Identify major developmental milestones of the neonate, infant, toddler, school-aged child, and adolescent, recognize when there is a delay in reaching these milestones, and describe the initial evaluation and need to refer a patient with evidence of delay.

4. Write a prescription specific for a child’s weight.

5. Describe the components of a health supervision visit including health promotion and disease and injury prevention, the appropriate use of screening tools, and immunizations for newborns, infants, toddlers, school aged children, and adolescents.

6. Describe the indications and interpretation of the following screening tests:
   a. developmental screening
   b. hearing and vision screening
   c. lead screening
   d. anemia screening
   e. Tuberculosis screening
   f. cholesterol screening

7. Define anticipatory guidance and describe how it changes based on the age of the child.

8. Demonstrate an ability to provide age-appropriate anticipatory guidance about nutrition, behavior, immunizations, injury prevention, pubertal development, sexuality, and substance use and abuse.

9. Identify failure to thrive and overweight/obesity in a child or adolescent using BMI and other growth measures and outline the differential diagnosis and initial evaluation.

10. List normal patterns of behaviors in the developing child and the typical presentation of common behavioral problems and issues in different age groups.

11. Counsel parents and children about the management of common behavioral concerns such as discipline, toilet training, and eating disorders.
12. Obtain a dietary history and provide nutritional advice to families and children.
13. List the immunizations currently recommended from birth through adolescence and identify patients whose immunizations are delayed.
14. Conduct a health supervision visit for a healthy adolescent, incorporating a psychosocial interview, developmental assessment and appropriate screening and preventive measures.
15. Discuss the characteristics of the patient and the illness that must be considered when making the decision to manage the patient in the hospital or in the outpatient setting.
16. Explain the management strategies for common stable chronic illnesses seen in children such as asthma, seasonal allergies, diabetes, atopic dermatitis and ADHD.
17. Select generally accepted pharmacologic therapy for the following common conditions in pediatric patients:
   a. acne
   b. acute otitis media
   c. allergic rhinitis
   d. asthma
   e. atopic dermatitis
   f. candida dermatitis
   g. impetigo
   h. streptococcal pharyngitis

**Emergency Department**

1. Describe the acute signs and symptoms and emergency management of the accidental or intentional ingestion of acetaminophen, aspirin, alcohol, narcotics, hallucinogens, antidepressants, volatile hydrocarbons and caustics.
2. Elicit a complete history when evaluating an intentional or unintentional ingestion or exposure to a substance including the route of exposure, the timing, the quantity and antecedent events.
3. List the symptoms of and describe the emergency management of shock, respiratory distress, lethargy, apnea, and status epilepticus in pediatric patients.
4. Describe the age-appropriate differential diagnoses and clinical findings of each of the below emergent clinical problems:
   a. airway obstruction/respiratory distress
   b. altered mental status
   c. apnea
   d. ataxia
   e. GI bleeding
   f. proptosis
   g. seizures
   h. shock
5. Demonstrate the “ABC” assessment as a means for identifying who requires immediate attention and intervention.
6. Discuss the characteristics of a patient that would necessitate admission to the hospital from the Emergency Department.
Normal Newborn Nursery

1. Describe the transition from the intrauterine to the extrauterine environment, including temperature regulation, cardiovascular/respiratory adjustment, glucose regulation, and initiation of feeding.
2. List the information from the history of pregnancy, labor, and delivery obtained from the parents or medical record that has implications for the health of the newborn.
3. Describe how gestational age can be assessed with an instrument such as the Ballard scale and identify key indications of gestational maturity.
4. List the differential diagnosis and complications for the following common problems that may occur in the newborn:
   a. jaundice
   b. respiratory distress
   c. poor feeding
   d. large and small for gestation infants
   e. abnormalities such as tremulousness, irritability, lethargy, hypoglycemia
   f. prematurity
5. Describe how gestational age affects risks of morbidity or mortality in the newborn period.
6. Perform a complete physical exam of a newborn infant within 24 hours of birth.
7. Give parents of a newborn anticipatory guidance for the following issues:
   a. benefits of breastfeeding vs. formula for the newborn and mother
   b. normal bowel and urinary elimination patterns
   c. normal neonatal sleep and feeding patterns
   d. appropriate car seat use
   e. prevention of SIDS
8. Create a discharge and follow-up plan for the newborn based on gestational age, weight, bilirubin level, method of delivery and parental comfort.

Urgent Care

1. Perform a focused history and physical examination pertinent to the chief complaint of the patient.
2. Describe the key clinical findings and management of the following conditions:
   a. animal bites
   b. minor head injury
   c. nursemaids elbow
   d. sprains and fractures
   e. burns
   f. lacerations
3. Construct a follow-up plan for the patient upon discharge from the Urgent Care that includes communication with the patient’s primary care physician.
4. Recognize when a patient needs an increase in their level of care to either the Emergency Department or hospital admission.
Developmental Rounds

1. Describe the four developmental domains of childhood as defined by the Denver Developmental exam.
2. Describe how abnormal findings on the development screening tools would suggest a diagnosis of developmental delay, autism, pervasive developmental delay, and cognitive disability.
3. Distinguish between age-appropriate behavior, inappropriate or abnormal behavior, and those that suggest severe psychiatric or developmental illness in children of different ages.
4. Describe the genetic basis and clinical manifestations of the following syndromes, malformations, and associations:
   a. common chromosomal abnormalities (e.g. Trisomy 21, Turner syndrome)
   b. syndromes due to teratogens (e.g. fetal alcohol syndrome)
   c. other common genetic disorders (e.g. cystic fibrosis, sickle cell disease)
   d. single malformations with multifactorial etiology (e.g. spina bifida, cleft lip and palate)
5. Describe the use of chromosome studies in the diagnosis of genetic disorders.
6. Discuss the role of genetics in common multifactorial conditions.
7. Use a family history to construct a pedigree.

DIDACTICS

Required CLIPP Cases

Case 8-6 day old with jaundice

1. Recognize a newborn with jaundice.
2. Describe bilirubin physiology, including metabolism and toxicity.
3. Identify important history items, physical exam findings and laboratory data helpful in evaluating a newborn with jaundice.
4. Identify treatment options for hyperbilirubinemia in accordance with the American Academy of Pediatrics’ practice guideline “Management of Hyperbilirubinemia in the Healthy Term Newborn.”

Case 10-Infant with a fever

1. List the differential diagnosis of an infant with a fever, specifically conditions that are life threatening.
2. Describe the work up of a febrile infant based on presentation.
3. Distinguish the reliability of various methods of collecting a urine sample to diagnose a urinary tract infection.
4. Choose an empiric antibiotic and route of administration for an infant suspected of having a urinary tract infection.
5. Recommend appropriate diagnostic imaging of the urinary tract.
**Case 15-4 week old with vomiting**

1. List the important historical and review of systems questions relevant to an infant with vomiting.
2. List signs and symptoms of clinical dehydration and be able to calculate an approximate percentage of dehydration.
3. List the most common causes of vomiting in a young infant.
4. Recommend tests to determine the cause of vomiting and to ascertain the degree and type of dehydration.
5. Describe the indications for oral versus parenteral fluid replacement therapy.

**Case 18-2 week old with poor feeding**

1. Identify the characteristics of a heart murmur that would warrant further evaluation.
2. Recognize the signs and symptoms of congestive heart failure in an infant.
3. Understand the anatomy and pathophysiology of a ventricular septal defect.

**Case 19-16 month old with a first seizure**

1. Identify the causes of acute seizures in children.
2. Review the diagnostic studies needed in the evaluation of the child with seizures and fever.
3. Differentiate a simple febrile seizure from a complex febrile seizure.
4. List the principles of managing a child with a febrile seizure.

**Case 20-7 year old with headaches**

1. List key features in the history of the child with headaches.
2. List the elements of a thorough neurologic exam and interpret abnormalities.
3. Discuss the age appropriate differential diagnosis of headaches in children.
4. Discuss the differential diagnosis of ataxia in children.
5. Identify signs and symptoms of increased intracranial pressure.

**Case 22-16 year old with abdominal pain**

1. Review the physical examination findings suggestive of an acute abdomen.
2. Construct a differential diagnosis for acute abdominal pain in an adolescent.
3. Review the presentation of and risk factors for pelvic inflammatory disease.

**Case 23-15 year old with lethargy and fever**

1. Describe the different types of shock.
2. List the differential diagnosis of a lethargic child.
3. Describe the principles of effectively breaking bad news to a patient and a patient’s parents.
Case 24-2 year old with altered mental status

1. Describe the manifestations, toxicity and basic management of ingestions of lead.
2. Identify the environmental sources of lead and discuss the clinical and social importance of lead poisoning.

Case 25-2 month old with sleep apnea

1. Formulate a differential diagnosis for an infant with apnea or apparent life-threatening event (ALTE).
2. Describe the physical signs and symptoms of shaken baby syndrome.
3. List the recommended lab and radiologic studies to order for an infant with suspected physical abuse.
4. Describe the ethical and legal responsibility of health care workers to report suspected child abuse.

Case 26-9 week old with failure to thrive

1. Define failure to thrive in infancy and discuss its causes.
2. Explain the mechanism whereby cystic fibrosis causes malnutrition.
3. List the most common clinical characteristics of infants who have cystic fibrosis.
4. Discuss the basic genetics of cystic fibrosis.

Case 31-5 year old with puffy eyes

1. Compare and contrast the differential diagnosis for periorbital edema and generalized edema.
2. Discuss the differential diagnosis of proteinuria in a child.
3. State the laboratory characteristics seen with nephrotic syndrome.
4. Discuss the appropriate evaluation and initial management of a child who presents with the first episode of nephrotic syndrome.
5. Discuss the prognosis of a child who presents with the first episode of nephrotic syndrome.

OTHER REQUIREMENTS

Ethics Module

1. Describe the practical applications of the major ethical principles in the context of medical practice.
2. Identify the core issues involved in an ethical case scenario.
3. Develop a framework in which to analyze ethical issues.
4. List ways to effectively manage an ethical issue encountered in clinical practice.

Evidence Based Medicine project

1. Describe the evidence cycle using the 5 A’s.
2. Formulate a clinical question in PICO format from a patient scenario.
3. List types of clinical questions and match the appropriate study design to the type of question.
5. Critically appraise available evidence and synthesize into a conclusion that is relevant to the patient scenario.
6. Construct a Critically-Appraised Topic (CAT) Handout summarizing the pertinent evidence and your conclusion.

**Required Conferences** *(Morning Report, Grand Rounds, Chief Rounds, Problem Conference)*

1. Demonstrate a positive attitude and regard for education by demonstrating intellectual curiosity, initiative, dedication to being prepared, flexibility when differences of opinion arise, and reliability.
2. Identify and explore personal strengths, weaknesses (including knowledge gaps) and goals, in general and within specific patient encounters.
3. Describe the impact of stress, fatigue, and personality differences on learning and performance.
4. Demonstrate behaviors that enhance the experience of the entire group of learners.
5. Using individual patient cases as a starting point, list systems issues that occur and potential improvement strategies to improve patient care.
6. Develop an internally motivated process of inquiry and reflection that drives learning with some external guidance.

**Otoscopy Skills Workshop**

1. Correctly use an otoscope and insufflator to examine the tympanic membrane.
2. Describe and locate anatomic components of the middle ear.
3. Describe abnormalities in the appearance of the acutely infected tympanic membrane.
4. Demonstrate correct examination technique while examining the ear of an infant, toddler and older child.
5. List techniques that a practitioner can use to help examine the ear of an uncooperative child.

**Humanism Reflection and Rounds**

1. Create a safe space where positive and negative role modeling, patient care experiences, morally distressing events and students’ reactions can be reflected on and translated into an effective learning experience.
2. Construct an environment that promotes understanding of the chaotic and challenging circumstances of medical school and how a student may overcome this to become compassionate, effective physicians.
3. Define and strive to model humanistic qualities defined as empathy, compassion, altruism, responsibility and respect.
2016-17 Preceptorship (4th Year) Overarching Goals

Knowledge for Practice
1. Recognize the impact of continuity of care on health care delivery.
2. Compare the impact of nutrition, physical activity and weight on physical and mental health.
3. Reflect on the challenges of chronic disease management in the U.S. health care system.
4. Evaluate the roles of federal, state and private programs that pay for health care within the U.S. health care system.

Problem Solving and Clinical Skills/Patient Care
1. Develop proficiency in providing patient care in a community setting.
2. Conduct efficient and effective clinical medicine interviews.
3. Develop independent assessments and differential diagnoses.
4. Negotiate management plans with patients and Preceptors.
5. Provide continuous care and assure effective care transitions for patients as they move through multiple health care settings.
6. Participate in community health activities.

Practice-Based Learning and Improvement
1. Recognize contemporary health care issues and discuss their impact on the practice of medicine.
2. Recognize the importance of evidenced-based interventions in the success of efforts to address community health issues.
3. Reflect on how clinical experiences in non-academic medical practice, and personal experiences in a community may influence future career and life choices.

Systems-Based Practice
1. Analyze the Preceptor's relationship to the health care system in which he or she practices.
2. Analyze the complexities of a multidisciplinary health care system.
3. Describe the impact of local culture on health care, wellness, the work environment, and the community.
4. Recognize the impact of health care and reimbursement systems on the delivery of health care.
5. Recognize the effect of quality measurement and improvement on clinical decision-making, cost of care, and patient satisfaction.
6. Develop an understanding of a local quality improvement initiative.
7. Participate in planning the implementation of an evidence-based public health intervention in a community setting.
Interpersonal and Communication Skills
1. Work and communicate with doctors, nurses, therapists, physician assistants, medical assistants, chaplains and other health care personnel in a manner that fosters mutual respect and excellence in patient care.
2. Efficiently communicate patient information with attending physicians via oral and written presentations.
3. Interpret and incorporate the concerns of community members and health systems employees about priority health issues into a written plan for implementing an evidence-based public health intervention.

Professionalism
1. Expand upon personal and professional growth and development.
2. Conduct oneself in a professional manner.
3. Recognize areas of tension between professional, family and personal aspects of their lives.
2016-17 Preceptorship (4th Year) Learning Activity Objectives

CLINICAL ENCOUNTERS

Clinical Apprenticeship
1. Consistently generate differential diagnoses and demonstrate clinical reasoning.
2. Efficiently focus histories and exams based on differential diagnosis.
3. Independently generate treatment plans and manage patients with minimal oversight.
4. Effectively apply medical knowledge to patient care.
5. Write clear and concise notes to efficiently document patient encounters.
6. Deliver succinct and well-organized verbal presentations about patient encounters to the Preceptor.
7. Discuss options for balancing personal well-being and professional accomplishment in community practice.

OTHER REQUIREMENTS

Clinical Case Reports
1. Describe how the discontinuity of care, obesity, and lack of insurance interferes with the management of patients’ clinical issues.
2. Describe how specific people or programs in the health system and in the community assist with the medical management of patients’ clinical issues related to discontinuity of care, obesity, and lack of insurance.
3. Identify resources not currently available in the health system or community that, if present, might help with the medical management of patients’ clinical issues related to discontinuity of care, obesity, and lack of insurance.
4. Refer patients to appropriate community-based health care resources, outside of the Preceptor's health system, that can help with the management of a patient or specific patients’ clinical issues.
5. Protect private information in the case reports by not revealing information that can identify patients in the community.

Community and Health System Interviews
1. Describe the perspectives of individual interviewees about priority health issues and compare those with an analysis of health issues in the corresponding Community Health Improvement Plan.
2. Describe how the operations of the health system affect the clinical care of many individual patients.
3. Describe how health systems and community organizations can be resources to address health issues in the community.
Community Health Plan
1. Describe the demographics and socio-economic conditions of the community in which they are training and practicing.
2. Identify health issues of importance to community members and the health system that are also of professional importance to physicians.
3. Access public health literature, judge quality of evidence, and use evidence to select a public health intervention likely to effectively address a priority community health issue.
4. Propose a practical plan to implement an evidence-based community health intervention.
5. Present the plan to community and health system partners who may carry out the plan.

Small Group Discussion
1. Discuss impressions of a community-based clinical practice.
2. Explain how the Preceptorship experience in a community-based clinical practice relates to residency and career plans.

Large Group Discussion
1. Discuss the challenges of designing a practical plan to implement an evidence-based community health intervention.
2. Describe how the Preceptorship experience of identifying and addressing community health issues relates to career plans.
2016-17 Primary Care Clerkship Overarching Goals

Knowledge for Practice
1. Interpret the clinical features, differential diagnosis, and management of common acute and chronic medical conditions seen in the ambulatory medical setting.
2. Recognize the impact of select chronic conditions at the individual patient and societal levels.
3. Compare preventive strategies for common acute and chronic medical conditions seen in the ambulatory setting, in the clinic, and at the population level.

Problem Solving and Clinical Skills/Patient Care
1. Perform focused histories and physical exams relevant to common acute and chronic medical conditions.
2. Perform comprehensive wellness exams relevant to patient’s age and comorbidities.
3. Formulate treatment plans for common acute and chronic ambulatory medical problems.
4. Use test characteristics, predictive values, and likelihood ratios to enhance clinical decision making.
5. Distinguish preventive screening tests for individual patients, acknowledging prevalence, risk factors, and outcomes.
6. Formulate answerable clinical questions from patient interactions.

Practice Based Learning and Improvement
1. Practice life-long learning skills, including the use of evidence based medicine at point of care.
2. Differentiate and appraise preventive service guidelines and recommendations from various organizations.
3. Identify individual learning goals, and self-assess knowledge and behaviors.

Systems Based Practice
1. Identify community assets and system resources to improve the health of individuals and populations.
2. Demonstrate a clinical perspective that recognizes the impact of multiple systems on patient health.

Interpersonal and Communication Skills
1. Present cases to preceptor in a patient-centered manner, integrating further testing recommendations, diagnostic probabilities, and evidence-based treatment recommendations as indicated.
3. Establish effective relationships with patients and families using patient-centered communication skills.
4. Ascertain patient and family beliefs regarding common acute and chronic medical conditions.
5. Educate patients and families regarding common acute and chronic medical conditions.
6. Demonstrate the process of negotiating management plans with patients, incorporating patient needs and preferences into care.
7. Check for patient’s understanding of follow-up plan, including treatments, testing, referrals, and continuity of care.

Professionalism
1. Recognize and address self-care and personal issues that affect one’s ability to fulfill the professional responsibilities of being a physician.
2. Assume responsibility, behave honestly, and perform duties in a timely, organized, respectful, and dependable manner.
3. Seek, accept, and apply constructive feedback appropriately.
2015-2016 Primary Care Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

Outpatient Clinic

1. Conduct a focused history appropriate for common acute and chronic medical conditions seen in the ambulatory medical setting.
2. Perform a focused physical exam appropriate for common acute and chronic medical conditions seen in the ambulatory medical setting.
3. Formulate a differential diagnoses appropriate for common acute and chronic medical conditions seen in the ambulatory medical setting.
4. Perform comprehensive wellness exams, identifying screening and preventive recommendations relevant to patient's age and comorbidities.
5. Create written notes to document a patient encounter for an acute problem and for a comprehensive, preventive care visit.
6. Demonstrate use of test characteristics, predictive values, and likelihood ratios in formulating assessments and treatment plans appropriate to patient's situation.
7. Formulate clinical questions during patient encounters and demonstrate understanding of evidence-based resources for point-of-care use.
8. Explain and negotiate treatment plans with patients and family, using a perspective and language that are patient-centered.
9. Perform comprehensive, well-organized, and appropriately succinct verbal presentations to the preceptor.
10. Explain the indications for use of EKG, Chest X-ray, stress testing, and echocardiogram in the evaluation of patients presenting with chest pain.
11. Be able to interpret an EKG.
12. Describe imaging test options and indications for their use in the evaluation of patients presenting with abdominal pain, back pain, headache, and musculoskeletal pain, including options such as CT scan, ultrasound, and plain films.
13. Explain initial treatment options for GERD, IBS, constipation, diarrhea, back pain, migraine headaches, carpal tunnel syndrome, shoulder impingement, sprains/strains, and Acute Otitis Media.
14. Describe indications to screen for asthma, depression, diabetes, lipid disorders, hypertension, and substance abuse.
15. Perform screening for asthma, depression, diabetes, lipid disorders, hypertension, and substance abuse.
16. Identify staging scales used to grade asthma and depression severity.
17. Explain initial treatment options and long-term treatment options for asthma, depression, diabetes, hyperlipidemia, hypertension, obesity, and substance abuse.

Problem-Based Learning

Case 1: Young woman with abdominal pain

1. Use history and physical findings to differentiate among common causes of abdominal pain, diarrhea, and headache in primary care.
2. Identify ‘red flags’ for abdominal pain and headache.
3. Select appropriate laboratory and diagnostic evaluations in the work-up of abdominal pain and diarrhea in the primary care setting.
4. Formulate and present an effective management plan for a patient with irritable bowel syndrome.
5. Apply epidemiologic evidence to determine indications for imaging or other ancillary testing in headache, and counsel patients about this.
6. Formulate an effective management plan for a patient with migraine headache.
7. Identify ways to counsel adolescent patients about health promotion, screening, disease and injury prevention.
8. Demonstrate strategies for discussing sensitive topics with teens.
9. Adequately describe a rash and use on-line resources to develop a differential diagnosis and treatment plan.

**Case 2: 54 year old man with type 2 diabetes mellitus**

1. Perform an appropriately focused history and physical to diagnose signs, symptoms and sequelae of Type 2 Diabetes.
2. List the appropriate laboratory tests, preventive measures, and monitoring involved in diabetes disease management.
3. Discuss how clinicians can use disease management to enhance patient care.
4. Formulate and present an effective management plan for a patient with diabetes, including properties of commonly-used medications.
5. Describe how diabetes impacts treatment of dyslipidemia and hypertension (lipids and hypertension covered more fully in the next CBL case).
6. Discuss the rationale for and different approaches to alcohol use disorders in the ambulatory setting.
7. Demonstrate Motivational Interviewing for weight loss efforts with overweight/obese patients.
8. Counsel patients regarding nutrition and exercise, medication options, and surgical treatment of obesity.
9. Recommend appropriate health promotion for men over 50.
10. Discuss evidence and counsel a patient regarding the pros and cons of prostate cancer screening and digital rectal exam stool testing.
11. Describe evaluation of sleep-disordered breathing.
12. Diagnose common cutaneous fungal and yeast rashes and provide appropriate treatment.

**Case 3: 48 year old woman sub-sternal chest pain**

1. Differentiate among common causes of chest pain using history and physical findings; identify risk factors for coronary artery disease and determine pretest prevalence (calculate difference with and without smoking – can we use this information to motivate patients to quit?).
2. Apply test sensitivity, specificity, pretest probabilities and likelihood ratios to select and interpret appropriate tests for the evaluation of chest pain and cardiac risk assessment.
3. Describe appropriate screening, diagnosis and treatment of hyperlipidemia.
4. Diagnose, evaluate and treat a patient with hypertension.
5. Discuss diagnosis and management of GERD.
6. Effectively counsel a patient to change a behavior, and counsel patients on assistive medications and techniques for smoking cessation.
7. Screen patients for domestic violence/abuse, discuss how to locate and refer to available resources.
8. Identify ways to counsel adult woman on health promotion.

**Case 4: 17 month old with running nose and cough**

1. Determine major causes of respiratory distress in children, and discuss the role of infectious disease versus airway disease.
2. Describe the diagnosis and management of asthma, allergies, and upper respiratory infections, including acute and serous otitis media.
3. Discuss which aspects of the physical exam might be helpful in developing a plan of treatment for each disease state in Objective #2.
4. Apply the "Guidelines for Diagnosis and Management of Asthma," including the use of environmental/trigger control and medications. Demonstrate how to create an asthma action plan and how to revise the plan if control is not achieved.
5. Teach a patient how to use a peak flow meter and interpret the results as well as how to use a metered dose inhaler with a spacing device.
6. Identify common pediatric skin rashies including eczema and impetigo and suggest appropriate treatments.
7. Identify appropriate health promotion/disease prevention issues for pre-adolescent children.
8. Identify ways to counsel parents about pediatric nutrition/exercise/weight management.

**Case 5: 78 year old woman with back pain**

1. Describe history (including 'red flags'), physical examination and treatment of back pain.
2. List indications for imaging for back pain.
3. Discuss screening, diagnosis and treatment of depression.
4. Counsel patients on pharmacologic treatment for depression.
5. Outline screening, diagnosis and treatment of osteoporosis.
6. Explain results of bone mineral density testing.
7. Illustrate a stepwise approach to chronic pain management.
8. Describe controversies in management of patients with non-cancer pain, and discuss methods for patient monitoring.
9. Recognize common skin cancers (basal cell, squamous cell, melanoma) and counsel patients regarding surgical excision.
10. Describe challenges faced by elderly patients, including access to services, loss of independence, physical limitations and financial concerns, and how these affect their health.
11. Identify ways to counsel an elderly patient regarding health maintenance, including when to cease screening and discussing end-of-life issues.

**Dermatology**
1. Describe a skin lesion using appropriate medical terminology.
2. Utilize on-line and text resources to identify common skin lesions including:
   - Actinic keratosis
   - Seborrheic keratosis
   - Keratoacanthoma
   - Melanoma
   - Squamous cell carcinoma
   - Basal cell carcinoma
   - Warts
   - Inclusion cysts

**Diabetic Foot Exam**
1. Explain the importance of the diabetic foot exam
2. Describe the key components of a diabetic foot exam
3. Perform an appropriate diabetic foot exam and recognize key findings
4. Describe how the exam is incorporated into primary care practice (such as how often is exam done, who performs the exam, how it is recorded in the medical record, and how normal and abnormal results could affect further work-up and management of the patient with diabetes).

**Evidence Based Medicine**
1. Identify knowledge gaps that arise in the course of patient care.
2. Explain the levels of evidence and strength of recommendations available to guide decision making.
3. Formulate clinical questions and categorize these as foreground or background.
4. Acquire an evidence-based answer to clinical questions.
5. Integrate information searches into clinical care utilizing the most appropriate on-line information resources.

**Musculoskeletal**
1. Describe the essential basic exam components for any painful joint.
2. Explain the special test maneuvers specific to the knee and shoulder and the significance of these tests.
3. Perform an appropriate knee and shoulder exam.

**OTHER REQUIREMENTS**

**Community Engagement Project**
1. Effectively form a partnership with a Wisconsin AHEC system and a community organization.
2. Identify needs of the community and the partner organization.
3. Discuss the impact of the project on the community, the partner organization, and the student.
4. Synthesize the project experience and describe challenges and lessons learned.

**Self-directed Learning**
(Use the course syllabus, on-line reading resources, and clinical questions as guides)
1. Describe the pathophysiology, differential diagnosis, diagnostic testing, and treatment options for the following medical conditions:
   a. Abdominal Pain
   b. Chest Pain
   c. Headache
   d. Musculoskeletal pain
   e. Respiratory Infections
   f. Asthma & COPD
   g. Depression
   h. Diabetes
   i. Hyperlipidemia
   j. Hypertension
   k. Substance Abuse
   l. Skin lesions/Dermatology

**Motivational Interviewing Exercise**
1. Demonstrate motivational interviewing techniques to help influence patient behavior.
2. Discuss challenges, successes, and strategies in assisting a patient in making behavioral changes.
2016-17 Psychiatry Clerkship Overarching Goals

Knowledge for Practice
1. Be able to use the biopsychosocial model of illness which is applicable to the care of all patients.
2. Describe the major psychiatric diagnoses as defined in the DSM-IV-TR and DSM-V in the context of epidemiology, pathophysiology, risk factors, substance-related contributions, clinical presentation and prognosis.

Problem Solving and Clinical Skills/Patient Care
1. Be able to conduct an adequate psychiatric interview, including skills in recognizing and categorizing psychological and behavioral phenomena as described in the mental status exam for common psychiatric disorders.
2. Be able to formulate a differential diagnosis from the interview and mental status exam utilizing DSM-IV-TR and DSM-V criteria and biopsychosocial factors for common psychiatric disorders.
3. Be able to develop and execute an initial treatment plan, including further diagnostic studies, psychotherapeutic, psychopharmacologic, and somatic interventions with an understanding of their indications.

Practice Based Learning and Improvement
1. Formulate skills in assembling and integrating information relevant to patient care from multiple sources, including utilizing databases in searches for assessment and treatment of psychiatric illness.
2. Research evidenced-based materials that are applicable to patients' care and incorporate this evidence into the patient's assessment and treatment of psychiatric illness.

Systems Based Practice
1. Demonstrate respect for, and integrate the care of hospitalized psychiatric patients with all team members, including other psychiatrists, residents, psychologists, nursing staff, social work staff, occupational therapy staff, consulting physician staff, and clergy members.
2. Demonstrate respect for, and integrate the care of patients in the outpatient setting with all team members, including other psychiatrists, residents, primary care or other physicians, psychologists, nursing staff, social work staff, case managers, family members, and any others involved in the patient's ongoing outpatient care plan.
3. Educate patients about available system resources for psychiatric illness and their role in accessing and working within these systems.

Interpersonal and Communication Skills
1. Exhibit the ability to engage a patient in a psychiatric interview and psychotherapeutic relationship appropriate to care in a hospital or outpatient
setting, which includes demonstrating an ability to establish rapport, manage patients’ reactions, discuss sensitive information, and discuss assessment and treatment plans.

2. Exhibit the ability to recognize and manage one’s personal reactions and responses to patients that may enhance or detract from an appropriate professional relationship, which may include excessive sympathy, anger, rejection, fear, over-emphasis on interpersonal control, or social and cultural differences.

3. Be able to present and discuss the biopsychosocial assessment, DSM-IV-TR and DSM-V diagnoses and treatment plan with colleagues, including psychiatrists, psychologists, residents, social workers, nursing staff, consulting physicians and other physicians involved in the patient’s care.

**Professionalism**

1. Describe the details and reasons for extreme care of confidentiality in working with patients with psychiatric illness and that appropriate releases of information have been obtained before information is shared.

2. Demonstrate appropriate professional boundaries in the context of interpersonal issues which arise during psychiatric decompensation and other psychopathology, which includes management of appropriate psychotherapeutic alliance and appropriate limits.

3. Explain the basic ethical principles that apply to involuntary commitment to psychiatric care, appropriate use and limits of restraints and seclusion, the complex clinical and legal issues around the assessment of competency, and the interplay of principles such as autonomy, paternalism, and safety of others.

4. Be aware of the importance of humanism and empathy during the psychiatric care of patients and appreciate the importance this has on clinical care.
2016-17 Psychiatry Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

**Outpatient Clinic (primarily observational)**
1. Discuss the management and treatment of patients in a non-acute setting.
2. Discuss the importance of standardized assessments and rating scales in monitoring response to treatment.
3. Discuss important vital sign and laboratory monitoring in the context of treatment with various psychiatric medications.

**Inpatient Psychiatry Ward and C/L Services**
1. Obtain histories to generate a complete description of patient’s symptoms.
2. Ascertain patient/family and cultural beliefs regarding psychiatric illness.
3. Perform appropriately focused mental status exam.
4. Succinctly present patient cases and differential diagnosis and biopsychosocial formulation.
5. Develop a preliminary management plan, incorporating patient needs and preferences in care.
6. Provide psychoeducation to patients and family regarding psychiatric illness
7. Counsel patients regarding psychiatric medications (risks, benefits and alternative).
8. Coordinate and communicate with outpatient providers.
9. Participate in family psychoeducational meetings.
10. Discuss the importance of consent in communication with outpatient providers, family and supports, including gathering and documenting written consent for these communications.
11. Discuss suicide risk and protective factors and incorporate into safety planning.
12. Document in the form of H&Ps and SOAP notes the information from patients, assessments, and treatment.
13. Discuss the use, importance, and practice of electroconvulsive therapy.
14. Evaluate (perform history and mental status exam) a patient with a mood disorder (major depressive disorder or bipolar disorder) AND do either a written report or an oral presentation.
15. Evaluate (perform history and mental status exam) a patient with suicidal ideation AND do either a written report or an oral presentation, with a specific focus on assessment of the risk of suicide.
16. Evaluate (perform history and mental status exam) a patient with an anxiety disorder (generalized anxiety disorder, panic disorder, obsessive-compulsive disorder, or post-traumatic stress disorder) AND do either a written report or an oral presentation.
17. Evaluate (perform history and mental status exam) a patient with a psychotic disorder (schizophrenia, schizoaffective disorder, or mood disorder with psychotic features) AND do either a written report or an oral presentation.
18. Evaluate (perform history and mental status exam) a patient with dementia or delirium AND do either a written report or an oral presentation.
19. Evaluate (perform history and mental status exam) a patient with a substance use disorder (abuse or dependence) AND do either a written report or an oral presentation.
20. Assist in the evaluation, management and disposition of a patient with chronic mental illness (severe mood disorder, schizophrenia or schizoaffective disorder) by interacting with a member of the patient’s outpatient mental health system (case manager or social worker).

Inpatient Psychiatry Ward Rounds and Treatment Team-based Rounds
1. Perform appropriate pre-rounding assessment of patient.
2. Analyze patient vitals and labs.
3. Present patient to team in a well-organized format highlighting pertinent positives and negatives.
4. Appropriately prioritize differential diagnosis and discuss a preliminary treatment plan.
5. Interact within the multidisciplinary model of care.

OTHER REQUIREMENTS

Psychiatry Department Grand Rounds/Conferences
1. Recognize the importance of principles of evidence-based research and its application to clinical care.

Faculty Directed Patient Interviews and Discussion
1. Appreciate modes of developing rapport and therapeutic alliance.
2. Discuss the diagnosis, biopsychosocial formulation, and treatment options to clinical care.

Student Directed and Supervised Interviews and Discussion
1. Obtain histories to generate a complete description of patient’s symptoms.
2. Perform appropriately focused mental status exam.
3. Succinctly present patient cases, differential diagnosis, and biopsychosocial formulation.
4. Develop preliminary management plans.
5. Synthesize and discuss the patient encounter, including the understanding of the development of rapport.

Student Presentations and Discussions of Topics of Interest and Articles Related to Psychiatry
1. Utilize evidenced-based literature in psychiatry.
2. Apply evidenced-based materials to cases and topics of interest in psychiatry.
3. Present researched topics to colleagues.
Self-Directed Learning to Prepare for Seminars
1. Use online reading materials and cases to prepare to discuss the differential diagnoses and treatment of common psychiatric disorders.

Outpatient Addiction Treatment
1. Appraise the treatment modalities of Alcoholics Anonymous (or comparable) meetings and discuss experience among peers and faculty.

Case-Based Seminars and Small Groups
Anxiety Disorders
1. Identify the DSM diagnostic criteria for panic disorder with and without agoraphobia, social phobia, generalized anxiety disorder and obsessive-compulsive disorder.
2. Describe the epidemiology, pathophysiology, risk factors, clinical presentation, and prognosis of panic disorder with and without agoraphobia, generalized anxiety disorder, social phobia and obsessive-compulsive disorder.
3. List the medical etiologies of anxiety.
4. Perform a history appropriate to and targeting panic disorder with and without agoraphobia, generalized anxiety disorder, social phobia and obsessive-compulsive disorder.
5. Formulate a differential diagnosis of a patient presenting with anxiety.
6. Describe the appropriate medical evaluation of patients presenting with complaints of anxiety.
7. Recommend treatment for panic disorder with and without agoraphobia, generalized anxiety disorder, social phobia and obsessive-compulsive disorder.

Bipolar Disorder
1. Identify the DSM diagnostic criteria for mania, hypomania, mixed episodes, and BPAD type I and type II.
2. Describe the epidemiology, pathophysiology, risk factors, clinical presentation, and prognosis of BPAD.
3. List the substance-related and general medical etiologies of mania.
4. Apply a biopsychosocial formulation to the assessment and diagnosis of a patient with BPAD.
5. Develop a differential diagnosis in a patient presenting with symptoms and signs of BPAD.
6. Develop a treatment plan for a patient with BPAD, including pharmacological and psychotherapeutic interventions.

Child and Adolescent Psychiatry
1. Identify the DSM diagnostic criteria for ADHD.
2. Describe the epidemiology, pathophysiology, risk factors, clinical presentation, and prognosis of ADHD.
3. List the substance-related and general medical etiologies of ADHD.
4. Apply a biopsychosocial formulation to the assessment and diagnosis of a patient with ADHD.
5. Develop a differential diagnosis in a patient presenting with symptoms and signs of ADHD.
6. Develop a treatment plan for a patient with ADHD including pharmacological and psychotherapeutic interventions.

**Cognitive Disorders**
1. List the etiologies of cognitive decline in the elderly, and the clinical features associated with each etiology.
2. Describe the functional assessment of an older adult.
3. Distinguish among dementia, delirium and depression as causes of cognitive decline in the elderly.
4. Describe the use of bedside cognitive testing to determine the nature and severity of cognitive decline.
5. Select laboratory and imaging studies to conduct in the evaluation of a patient with cognitive decline.
6. Develop a multifaceted treatment plan for a patient with dementia.

**Cultural Competency**
1. Describe how social and cultural issues are integral to patient’s understanding and experience of health and illness.
2. Describe how social and cultural differences between physicians and patients influence communication and clinical decision making.

**Humanism and Debriefing**
1. Describe cases or situations that evoked an empathic response or on the other hand made maintaining empathy challenging.
2. Compare common situations and themes encountered with peers and how similar or different peer response was.
3. Describe how these various cases and situations can promote empathy or engender burn-out.
4. Describe situations and cases where the mental health provider’s emotional response can be salient in the care that is provided and how providers feel about themselves.

**Depressive Disorders**
1. Identify the DSM diagnostic criteria for MDD.
2. Describe the epidemiology, pathophysiology, risk factors, clinical presentation, and prognosis of MDD.
3. List the substance-related and general medical etiologies of mania.
4. Apply a biopsychosocial formulation to the assessment and diagnosis of a patient with MDD.
5. Develop a differential diagnosis in a patient presenting with symptoms and signs of MDD.
6. Develop a treatment plan for a patient with MDD including pharmacological and psychotherapeutic interventions.

**Psychotic Disorders**
1. Identify the different diagnostic categories of psychotic disorder
2. List the initial work up for first episode psychosis
3. Identify the diagnostic criteria for schizophrenia and different subtypes
4. Enumerate the differential diagnosis of schizophrenia.
5. List the substance-related and general medical etiologies of psychosis.

**Substance Use Disorders**
1. Describe withdrawal symptoms for alcohol and opioids.
2. Describe the medical risks associated with alcohol withdrawal.
3. List the DSM criteria for abuse and dependency.
4. Describe the role that dual diagnosis plays in identifying and treating addiction issues.
2016-17 Radiology Clerkship Overarching Goals

Knowledge for Practice
1. List the indications for the most commonly performed imaging examinations.
2. Demonstrate knowledge of human anatomy by recognizing key structures on various imaging modalities.

Patient Care (Problem Solving and Clinical Skills)
3. Advise patients and colleagues on the risks, benefits, limitations and indications of each of the most commonly performed imaging examinations.
4. Identify critical and high priority imaging findings on the most commonly performed imaging exams and discuss their importance in clinical patient management.

Interpersonal and Communication Skills
5. Demonstrate understanding of the important role of communication in radiology with specific emphasis on the imaging requisition, radiology report, urgent or unexpected findings, and recommendations for follow-up imaging or procedures.

Professionalism
6. Apply the principles of mutual respect, honesty, and discretion in the use of patient clinical data and during all course activities.

Practice-Based Learning and Improvement
7. Build a model for solving imaging related problems that effectively integrates indications for imaging, evidence-based uses for imaging, analysis of imaging findings and generation of an imaging differential diagnosis.

Systems Based Practice
8. Regard the role of the radiologist in the care of patients undergoing imaging evaluation or image guided procedures by participating in interactive image interpretation sessions.
2016-17 Radiology Clerkship Learning Activity Objectives

CLINICAL EXPERIENCE

1. Critically assess an imaging plan and propose revisions that will improve patient care benefits, efficiency, cost-effectiveness, and/or accuracy of imaging.
2. List at least three benefits and three drawbacks of the modern practice of Radiology.
3. Discuss the critical importance of useful clinical history in imaging interpretation.
4. Analyze workflow within the radiology reading room and discuss the various types of communication.
5. Discuss the importance of communication in the practice of Radiology.
6. Construct a diagnostic radiology report including a description of imaging technique, patient history, imaging findings, and overall impression and recommendations.

Cardiothoracic Imaging

1. Identify the different radiographic views of the chest (AP, PA, Lateral, Decubitus, Inspiratory/Expiratory, Cross-table lateral) and describe clinical benefits and limitations of each.
2. Employ a systematic search pattern for interpreting chest radiographs.
3. List different types of pathologies that can produce focal "opacity" on chest radiographs.
4. Discuss the radiographic findings that may help characterize lung opacity as atelectasis.
5. Discuss the radiographic findings that help characterize lung opacity as "consolidation" and formulate a differential diagnosis based on CXR findings.
6. Describe signs of and be able to identify pneumothorax, pneumomedistinum, and pneumopericardium on chest radiographs.
7. Differentiate between pulmonary vascular congestion, interstitial pulmonary edema, and alveolar edema on chest radiographs.
8. Discuss the criteria for diagnosis of cardiomegaly on chest radiographs.
9. Recognize the correct positioning of venous lines, arterial lines, and endotracheal tubes on chest radiographs.
10. Discuss the role of CT in evaluating the chest.
11. Compare the conspicuity of chest "masses" on CXR and CT.
12. Discuss the utility of Fleischner Society guidelines in management of solitary pulmonary nodules seen on CT.
13. Describe imaging modalities available for imaging the heart and great vessels.
14. Identify the appropriate indications for cardiac CT, cardiac MRI, and thoracic CT angiography.
15. Choose an appropriate imaging algorithm for common diagnostic scenarios including:
   Suspected pneumonia
Suspected pulmonary embolism
Solitary pulmonary nodule
Suspected aortic dissection

Abdominal Imaging

1. Identify the different radiographic views of the abdomen (KUB, upright and supine AP, Decubitus) and describe the utility of each.
2. Employ a systematic search pattern for interpreting abdominal radiographs.
3. Recognize free intra-abdominal air on radiographs and describe how patient positioning affects sensitivity for detection.
4. Differentiate between dilated small bowel and large bowel on radiographs.
5. Describe indications for GI fluoroscopy procedures.
6. Recommend appropriate cross-sectional imaging modality (CT vs. MRI) for given abdominal complaints including appropriate use of contrast, when necessary.
7. Describe appropriate indications for common ultrasound studies.
8. Describe clinical situations in which ultrasound is used to guide interventional procedures.
9. Recognize the correct and incorrect position of feeding tubes.
10. Construct the appropriate imaging algorithm for common diagnostic scenarios including:
    - Suspected SBO
    - Right upper quadrant pain
    - Renal colic
    - Suspected acute appendicitis
    - Suspected pancreatitis
    - Suspected diverticulitis
    - Pelvic pain in women of child-bearing age

Musculoskeletal Imaging

1. Create an imaging plan to evaluate patients with acute musculoskeletal trauma.
2. Explain the critical utility of obtaining multiple radiographic views in fracture evaluation.
3. Accurately and succinctly describe fractures based on their radiographic appearance.
4. Identify and explain the significance of intra-articular fracture extension.
5. Identify an elbow joint effusion on radiographs and provide a differential diagnosis based on patient presentation.
6. Identify glenohumeral dislocation on radiographs and differentiate between anterior and posterior dislocation.
7. Explain the important role of radiographs in the evaluation of MSK problems.
8. Identify the important radiographic landmarks used to evaluate the cervical spine in the setting of acute trauma.
9. Discuss indications for CT and MRI for spine and differentiate this from the use of these modalities in the evaluation of extremity trauma. 
10. Identify thoracic and lumbar spine fracture patterns based on imaging appearance and mechanism of injury.
11. Discuss most common associated injuries and predisposing conditions for various spinal injury types.
12. Describe the classic features of osteoarthritis and contrast these with the features of rheumatoid arthritis, seronegative spondylo-arthropathy, gout, and erosive osteoarthritis.
13. Characterize arthritis patterns based on the radiographic appearance of patients with joint pain.
14. Construct the appropriate imaging algorithm for common diagnostic scenarios including:
   - Chronic or acute joint pain
   - Extremity trauma
   - Spinal trauma
   - Acute hip pain
   - MSK infection

**Pediatric Imaging**

1. Discuss the unique challenges faced when imaging children and how these may affect choice of imaging modality.
2. Contrast normal chest radiographic anatomy of an infant compared to that of an adult.
3. Discuss indications for ordering Upper GI and Contrast enema in newborn infants.
4. Identify normal bowel rotation on Upper GI.
5. Discuss pathophysiology, imaging findings, and treatment of ileocolonic intussusception.
6. Describe steps of a voiding cystourethrogram (VCUG) and discuss utility of imaging study in pediatric patient with febrile UTI.
7. Recognize growth plates as a normal finding in pediatric MSK imaging.
8. Explain the significance of physeal involvement of a fracture.
9. Identify injuries that raise suspicion for non-accidental trauma.
10. Localize the position of vascular lines, endotracheal tubes, and feeding tubes in pediatric patients and identify misplaced devices.
11. Construct the appropriate imaging algorithm for common diagnostic scenarios including:
   - Bilious vomiting in newborn infant
   - Suspected pyloric stenosis
   - Suspected intussusception
   - Limping child
   - First febrile UTI
   - Suspected non-accidental trauma
Breast Imaging

1. Explain how a mammogram is performed in terms a patient would understand.
2. Differentiate between CC and MLO positioning on a mammogram.
3. Explain the rational for breast compression in mammography.
4. Describe the four major mammographic imaging findings.
5. Discuss current recommendations for screening mammography.
6. Compare the role of screening mammography vs diagnostic mammography and list the indications for a diagnostic mammogram.
7. Summarize the risks and benefits of screening mammography.
8. Discuss the utility of the BI-RADS atlas and how it standardizes terminology, assessment, and treatment and follow-up imaging recommendations.
9. Describe the utility of ultrasound in the work-up of a breast mass.
10. List indications for breast MRI.
11. Construct the appropriate imaging algorithm for common diagnostic scenarios including:
   - Palpable breast mass in young female
   - Palpable breast mass in older female
   - Young female with family history of BRCA-1 gene mutation

Interventional Radiology

1. Explain the indications for commonly performed Interventional Radiology procedures including transjugular intrahepatic portocaval shunt (TIPS), percutaneous nephrostomy, abscess drainage, tumor ablation and embolization, central venous access, vascular occlusion, IVC filter placement, and revascularization techniques.
2. Advise patients of the preparation regimen for the most commonly performed interventional procedures including necessary laboratory studies and their reference values as well as pertinent patient precautions and restrictions.
3. Assess the position of central venous and drainage catheters on imaging studies and successfully identify malpositioned devices.
4. Name and identify important complications following interventional radiology procedures including retroperitoneal hematoma, pseudoaneurysm, arterial dissection, thromboembolism, and AV fistula.
5. Describe how different imaging modalities are used to guide interventional and diagnostic procedures.

Nuclear Medicine

1. Educate patients on the basic differences between general nuclear medicine studies and radiography including the basic functions of the gamma camera and radionuclides.
2. Recognize images from common Nuclear medicine studies including bone scan, GI bleeding study, V/Q scan, Cardiac stress test, and PET/CT.
3. Discuss benefits and limitations of common Nuclear Medicine studies.
4. Discuss role of PET/CT exam in evaluation of metastatic disease and seizure disorders.
5. Construct the appropriate imaging algorithm for common diagnostic scenarios including:
   - Acute cholecystitis
   - GI bleed
   - Suspected occult fractures
   - Suspected pulmonary embolism
   - Evaluation of metastatic disease

**Ultrasound Skills**

1. Describe the basic physics behind ultrasound image acquisition.
2. Successfully acquire key images from the abdominal ultrasound protocol.
3. Identify abdominal and pelvic organs based on their ultrasound appearances.
4. Describe the utility of ultrasound in evaluation of patients with right upper quadrant pain, lower abdominal pain, and pelvic pain.
5. Summarize the advantages and limitations of ultrasound as an imaging modality.
6. Explain advantages of transvaginal pelvic ultrasound compared to transabdominal pelvic ultrasound.
2016-17 Surgery Clerkship Overarching Goals

Knowledge for Practice
1. Recognize surgically relevant anatomy and understand the pathophysiology behind surgical disease processes.
2. Explain the clinical thought process and workup of a patient with a surgical problem, including developing an appropriate differential diagnosis.
3. Develop appropriate management and treatment plans for a patient with a surgical problem.
4. List complications related to common surgical procedures and recognize common complications of surgical procedures.
5. Show how radiology and laboratory testing can be used to aid in the diagnosis and management of patients with surgical problems.

Problem Solving and Clinical Skills/Patient Care
1. Perform a history and a physical examination that is appropriate for age, gender, clinical problem and setting.
2. Develop appropriate assessments and management plans for patients with surgical problems.
3. Write inpatient progress notes in an appropriate manner and maintain medical record in a clear, accurate, and legally appropriate professional manner.
4. Describe the structure of routine orders (admission, pre-op, post-op).
5. Observe informed consent process noting potential effect(s) of physician-patient power imbalance, cultural disparities and bias.
6. Demonstrate use of universal precautions.
7. Scrub, gown and glove appropriately.
8. Perform skin closure using percutaneous and subcutaneous sutures.

Practice-Based Learning and Improvement
1. Access, analyze and evaluate the scientific and medical literature in order to address learning needs.
2. Apply the principles of evidence-based practice.
3. Use electronically available medical information.

Systems-Based Practice
1. Apply HIPAA regulations regarding patient privacy and confidentiality.
2. Describe the triage and referral of patients with surgical disease and the role of sub-specialty surgical care.
3. Describe screening guidelines and be able to apply those guidelines to surgical patients.
4. Exhibit cost-conscious use of diagnostic and treatment modalities in surgical patients.
**Interpersonal and Communication Skills**
1. Demonstrate effective communication with patients, families, and professional associates incorporating cultural, ethnic, gender, racial, and religious sensitivity.
2. Convey key information accurately to the team.
3. Model accurate, clear, and concise oral and written presentations.
4. Demonstrate collegiality in working with all of those associated with the care of patients.
5. Identify and distinguish the roles of various health professionals in the patient care team.

**Professionalism**
1. Accept feedback appropriately and use it for self-learning and improvement.
2. Describe the basic principles of informed consent.
3. Work collaboratively with other members of the health care team.
4. Demonstrate punctuality and timeliness; attend required conferences and return required assignments in on time.
5. Demonstrate respect for all individuals - patients, families, employees, residents, faculty, other students, etc.
2016-17 Surgery Clerkship Learning Activity Objectives

CLINICAL ENCOUNTERS

Operating Room
1. Demonstrate and routinely practice appropriate universal precautions.
2. Demonstrate punctuality and timeliness and work collaboratively with the health care team in the OR setting.
3. Adhere to institutional dress code and policies regarding operating room environment.
4. Scrub, gown, and glove appropriately.
5. Perform skin closure using percutaneous and subcutaneous sutures.
6. Describe the anatomy relevant to the surgical procedure.
7. Describe the indications relevant to the surgical procedure and anticipate the complications.

Inpatient Rounds
1. Establish a relationship with a patient and their family.
2. Actively participate in the care of a surgical patient by communicating and engaging with all members of the health care team.
3. Perform a focused assessment of a post-operative patient and present your findings on morning rounds.
4. Apply HIPAA regulations regarding patient privacy and confidentiality.
5. Consider cost-conscious measures when choosing diagnostic and treatment modalities in surgical patients.
6. Utilize the electronic medical record to obtain background information and to identify studies relevant to the patient’s presenting problem.
7. Establish a daily plan for the post-operative management of a patient with a surgical problem.
8. Write inpatient progress notes in an appropriate manner and maintain medical record in a clear, accurate and legally appropriate professional manner.

Outpatient Clinic
1. Demonstrate the ability to efficiently perform a problem focused History and Physical on a patient with a surgical problem.
2. Present orally in a succinct yet complete way a focused History and Physical to a faculty member.
3. Utilize the electronic medical record to obtain background information and to identify studies relevant to the patient’s presenting problem.
4. Adhere to the institutional dress code in the clinic settings.
5. Demonstrate respect and compassion for patients and be respectful of patient privacy in the clinic setting.
6. Demonstrated an understanding of surgical disease and apply that knowledge in the development of an Assessment and Plan.
7. Observe informed consent process noting potential effect(s) of physician-patient power imbalance, cultural disparities and bias.

**Suture Workshop**
1. Demonstrate acute wound closure, subcuticular closure, instrument tying and hand tying.
2. Demonstrate sterile technique while gowning and gloving.
3. Demonstrate best practices in handling of sharps in the OR and when performing bedside procedures.
4. List the steps to take should a sharps injury occur.

**Physical Exam Skills Observation**
1. Solicit and apply feedback from faculty in order to improve physical exam techniques.
2. Perform a focused physical exam on a patient with a pathologic finding and confirm identification of the pathology.
3. Utilize history findings to perform a focused physical exam relevant to the patient’s physical presentation.

**DIDACTICS**

**Case Discussions**

**Abdominal Pain**
1. Demonstrate the importance of starting with a history and physical when presented with a patient with abdominal pain.
2. Describe the management and initial treatment for a patient with a small bowel obstruction.
3. List the indications for operating on a patient with a SBO and describe the complications of delaying the operation too long.
4. Understand the broad differential diagnoses of abdominal pain including the evaluation, differential diagnosis and treatment for a patient.

**Acute Scrotum & BPH**
1. Distinguish, through the history, physical examination and laboratory testing, testicular torsion, torsion of testicular appendices, epididymitis, testicular tumor, scrotal trauma, and hernia.
2. Determine which acute scrotal conditions require emergent surgery and which may be handled less emergently or electively.
3. List the signs and symptoms of BPH and the important components of the history and physical exam of a patient with BPH.
4. List the indications for treatment and the medical and surgical treatment options for BPH.
5. Contrast the evaluation of hematuria in the low-risk patient with that of the high-risk patient.
**Adult Cardiac**
1. Describe the basic principles of cardiac surgery set up and the use of cardiopulmonary bypass.
2. Define aortic aneurysm, based on location and basic management.
3. Explain the indications of surgery in aortic aneurysm with the goal of preventing acute aortic syndrome.
4. Describe the pathophysiology and surgical management of aortic stenosis.
5. Judge the pros and cons of biological and mechanical valve prosthesis.

**Breast**
1. Summarize the important history and physical exam features to assess when seeing a patient with breast disease.
2. Recognize clinical and pathologic features which place women at increased risk of breast cancer.
3. Be able to generate a differential diagnosis for women with calcifications identified on screening mammography and/or with breast mass.
4. List the different breast imaging modalities available and indications for each.
5. Recognize the optimal means of biopsying breast abnormalities.
6. Discuss the surgical options for management of both invasive and non-invasive breast cancer.

**Burns**
1. Summarize and prioritize the initial evaluation of a patient with a large burn.
2. Explain the physiology of burn shock and the importance of appropriate resuscitation.
3. Determine which patients should be transferred to a burn center.
4. Discuss the differences in therapy for different burn etiologies.
5. Know how to calculate the percent of burn and the suggested volume of fluid resuscitation.

**GI Bleeds**
1. Give the differential diagnosis for upper and lower GI tract bleeding.
2. Rank management priorities with an acutely bleeding patient.
3. Differentiate and describe the basic management of an upper and lower GI bleed.
4. State the evaluation of occult GI tract bleeding.

**Hand**
1. Describe the Anatomy of the hand.
2. Demonstrate the physical examination of the hand.
3. Interpret diagnostic studies of a patient with a hand problem.
4. Explain how to diagnose a throwing injury.
5. Describe the treatment of throwing injuries.

**Head and Neck Tumors**
1. List differential diagnosis of a neck mass in an adult.
2. List differential diagnosis of a neck mass in a child.
3. Describe the embrylogic origin of certain pediatric neck masses.
4. Summarize the evaluation and appropriate testing for a neck mass.
5. Describe the presentation, workup, and management of head and neck squamous cell carcinoma.

**Hematuria & Prostate Cancer**
1. Define significant microscopic hematuria and gross hematuria.
2. List the differential diagnosis for hematuria.
3. Describe the evaluation of a patient with hematuria.
4. Analyze the evaluation of a patient with an elevated PSA, or a suspicion of prostate cancer.
5. Debate the management options for patients diagnosed with prostate cancer.

**Hernias**
1. Appreciate the many different types of hernias and how they can cause problems.
2. Name the difference between reducible, incarcerated, and strangulated hernias.
3. Appreciate the presentation and exam findings that may indicate a strangulated hernia.
4. Describe techniques for reducing an incarcerated hernia.
5. Contrast the differences between direct, indirect and femoral hernias.

**Jaundice**
1. Create a differential diagnosis for the onset of jaundice associated with abdominal pain.
2. Create a differential diagnosis for the onset of painless jaundice.
3. Determine the appropriate laboratory and radiologic work up for evaluating patients with jaundice.
4. Summarize the management strategies associated with treating patients with jaundice.
5. Explain the expected short and long-term outcomes of patients treated for various causes of jaundice.

**Mediastinal and Pulmonary Mass**
1. Describe the anatomy of pulmonary nodules.
2. Explain the etiology of pulmonary nodules.
3. Summarize the diagnosis and treatment options of pulmonary nodules.
4. Describe anatomy and etiology of mediastinal masses.
5. Describe diagnostic and treatment options of mediastinal masses.

**Nutrition**
1. Describe the components for diagnosing and quantifying malnutrition.
2. Discuss the metabolism of starvation.
3. State the metabolic response to stress.
4. Define how to calculate a basic parenteral nutrition formulation.
5. Describe the implications of the refeeding syndrome.
**Obesity and the Surgical Patient**
1. Define the classification system of obesity.
2. Describe the multifactorial nature of obesity.
3. Identify common obesity-related comorbidities.
4. Acknowledge the role of bias as a negative factor in Doctor-Patient relationships with obese patients.
5. List the indications for, and the different types of Bariatric Surgery.

**Order Writing**
1. Write admission orders for all hospital patients using the mnemonic ADC VAAN DIMSL.
2. Calculate IV fluid rates for post-surgical patients.
3. Explain the management of surgical tubes and drains such as NG tubes and chest tubes.

**Organ Donation**
1. Describe the factors used in the allocation of kidneys and livers.
2. Contrast the differences between brain dead and donation after cardiac death donors.
3. Name at least 5 strategies to increase availability of organs for donation.
4. Describe the risks and outcomes for living donors (kidneys and livers).
5. List the benefits (at least 3) of a kidney transplant.

**Otolaryngology Emergencies and Pitfalls**
1. Determine diagnosis and management of upper airway emergencies. Trach vs. cricothyrotomy.
2. List common complications of airway procedures.
3. Describe the management of head and neck infections.
4. Describe the work up and management of facial and neck trauma (leforte fx, nasal fx, mandible fx, temporal bone fx, laryngeal fx).
5. Describe the management of epistaxis and the role of anterior vs. posterior packs.

**Pediatric Surgery**
1. Identify the more common congenital anomalies in pediatric surgery.
2. Recognize the basic x-rays of patients with common congenital anomalies in pediatric surgery.
3. List associated findings with common pediatric congenital anomalies.
4. Identify chromosomal defects that can be associated with the common pediatric congenital anomalies.
5. Describe the basic management priorities in managing these patients.

**Perianal Problems and Colon Cancer**
1. List the presenting signs and symptoms for various anorectal problems.
2. Differentiate between the basic management for hemorrhoids, fissures and fistulae.
3. Summarize and differentiate between the presentation and staging for colon and rectal cancer.
4. Describe the surgical treatment options for colon and rectal cancer.
5. Select an appropriate screening testing for colorectal cancer for a patient based on their risk factors.

**Perioperative Care**
1. Identify key elements of the preoperative preparation of patients for elective and emergent surgical intervention.
2. Acknowledge the importance and discuss the limitations of the informed consent process.
3. Appreciate the logistical implications of intraoperative patient positioning, equipment needs, and team communication.
4. Define strategies to minimize intraoperative and perioperative surgical and medical complications.

**Post-Operative Complications**
1. Develop a differential diagnosis of postoperative hypotension.
2. Construct an efficient work-up strategy to narrow down this differential diagnosis.
3. Understand the cardiopulmonary stresses that may occur after major surgery.

**Spine**
1. Describe the normal anatomy of the lumbar spine.
2. Explain the concept of 3 points of motion as it relates to degenerative conditions of the lumbar spine.
3. Differentiate between spinal stenosis causing neurogenic claudication vs. vascular claudication.
4. Describe treatment decisions in degenerative claudication.
5. Discuss factors influencing treatment decisions in adult scoliosis.

**Thyroid and Parathyroid**
1. Describe the initial evaluation and work up of a thyroid nodule (including history, PE, laboratory evaluation, and imaging).
2. Define the role of FNA and describe the indications in the evaluation of a thyroid nodule (when it should be obtained, what the accuracy is, limitations).
3. Describe the appropriate work up of common FNA diagnoses (non-diagnostic, benign, follicular neoplasm, suspicious or diagnostic of papillary thyroid cancer, medullary thyroid cancer).
4. Describe the initial management and evaluation of a patient with hypercalcemia/primary hyperparathyroidism (history and PE, laboratory evaluation, and imaging).
5. Contrast the differences between primary, secondary, and tertiary hyperparathyroidism.
6. List the common complications of thyroid/parathyroid surgery and their appropriate management (neck hematoma, hoarseness, hypocalcemia).

**Trauma and Shock**
1. Recognize the signs of Hypovolemic, Cardiogenic and Neurogenic shock.
2. Describe the initial assessment of the trauma patient.
3. List the indications for NG tube and Foley catheter placement (and the contra-
   indications).
4. Describe the classes of shock and the signs and symptoms thereof.
5. Explain the different types of pneumothoraces.

**Vomiting/Diarrhea/Constipation**
1. List the differential diagnosis of bowel obstruction.
2. Describe the evaluation of a patient with blood per rectum.
3. Explain the surgical management of ulcerative colitis.
4. Review the treatment of bowel obstruction.
5. Describe the workup of constipation.

**Workup of Incidental Abdominal Mass**
1. Describe the anatomy and radiology to generate a differential diagnosis of an
   abdominal mass.
2. List the elements of a patient's history to generate a differential diagnosis of an
   abdominal mass.
3. Describe abnormal physical examination findings to generate a differential
   diagnosis of an abdominal mass.
4. Review radiological imaging characteristics as clues to define the biological
   behavior of a tumor.
5. Describe when and how to use radiological tests in the evaluation of a possible
   abdominal mass.

**OTHER REQUIREMENTS**

**Humanism Rounds**
1. Discuss the implications of surgical treatment on patients' well-being and provide a
   humanistic perspective.
2. Reflect on a patient care experience during the surgery rotation in which there was
   a conflict between patient care and patient comfort.

**General Surgery Grand Rounds**
1. Be aware of current concepts and controversies in the field of Surgery.
2. Evaluate the quality of the medical and scientific literature presented.

**WISE-MD Modules**
1. Identify and address knowledge gaps through self-directed learning.

**Write-Ups-Case-Based Scenarios, Patient Evaluations**
1. Explain the clinical thought process and workup of a patient with a surgical
   problem.
2. Develop appropriate assessments and management plans for a patient with a
   surgical problem.
Evidence-Based Medicine Exercise

1. Demonstrate the ability to access, analyze, and use the scientific literature.
2. Apply the principles of evidence-based practice.