

Learning Objectives and Competencies

Although the Family Medicine Clerkship will be conducted at a variety of clinical sites in different settings, all students are expected to accomplish a core group of competencies. These competencies are based in three major domains: Patient Care, Health Promotion and Disease Prevention, and Professionalism.

a. Medical Knowledge

Learning Objectives for :

Case 1: 45-year-old female annual exam

1. Learn the principles of screening and the characteristics of a good screening test.
2. Identify risk factors for breast and cervical cancer based on family history, age, gender and exposure.
3. Learn how to perform a thorough breast exam.
4. Know current recommendations for mammography.
5. Learn the current recommendations for Papanicolaou testing and the different types of testing available.
6. Identify risk factors for osteoporosis and appropriate preventative measures.
7. Learn recommended immunizations for adults.
8. Recognize symptoms of menopause.
9. Identify cancer screening appropriate for a woman's yearly health exam.

Case 2: 55-year-old male annual exam

1. The student will be able to state the characteristics of a good screening test.
2. The student will be able to individualize the recommendation for cancer screening for common cancers for an adult male patient (e.g., lung, colorectal, and prostate).
3. The student will be able to state the significance of nutrition and obesity in health promotion and disease prevention.
4. The student will be able to prescribe an exercise program for a sedentary patient.
5. The student will be able to recommend timely vaccinations based on age, medical conditions, lifestyle, and environment.
6. The student will be able to perform smoking cessation counseling for patients who smoke.
7. The student will be able to state principles that guide behavior change counseling.

Case 3: 65-year-old female with insomnia

1. Learn common causes of insomnia in the elderly.
2. Learn the diagnostic criteria for major depressive disorder (MDD).
3. Learn how to use history, physical, and tests to rule out medical causes of depressive symptoms.
4. Understand the effects of depression on the patient's family.
5. Learn the common therapeutic options for MDD and their side effects.
6. Learn the risk factors for elder abuse.
7. Understand the importance of inquiring about the use of complementary and alternative therapies.
8. Understand how culture can affect the evaluation and treatment of conditions.

Case 4: 19-year-old female with sports injury

1. Create a differential diagnosis for ankle pain.
2. Know how to perform a focused history and physical appropriate for painful joints.
3. Know the signs and symptoms of life/limb-threatening injuries.
4. Describe the use of nonsteroidal anti-inflammatory drugs (NSAIDs) for strains/sprains.
5. Be able to utilize evidence-based medicine indications for radiologic evaluation of ankle injury.
6. Construct a treatment plan for ankle pain, including **RICE** (**R**est, **I**ce, **C**ompression, **E**levation).
7. Be able to provide counseling to the patient regarding injury prevention.
8. Understand the role of the family medicine physician in treating ankle injuries

Case 5: 30-year-old female with palpitations

1. Create a differential diagnosis of palpitations.
2. Describe the common presentations of hyperthyroidism.
3. Demonstrate the common physical findings in hyperthyroidism: Lid lag, tremor, and hyperreflexia.
4. List the common causes of hyperthyroidism.
5. Explain the initial evaluation of a patient with suspected hyperthyroidism.
6. Discuss the usual course of a patient with Graves' disease after radioactive iodine (RAI) treatment.
7. Discuss the treatment of hypothyroidism after RAI treatment.

Case 6: 57-year-old female presents for diabetes care visit

1. Collect and incorporate appropriate psychosocial, cultural, health literacy, and family data into the management plan of a patient with type 2 diabetes.
2. Locate and apply evidence-based standards of care in the management of a patient with type 2 diabetes mellitus.

3. Make informed decisions about diagnosis, monitoring, and pharmacologic management of type 2 diabetes patients using scientific evidence and clinical judgment.
4. Recognize the barriers to coordination of diabetes care and envision system-wide improvements that could improve coordination of diabetes care.
5. Recognize the importance of an inter-professional team approach in the care of patients with diabetes.
6. Describe the utility of the electronic medical record in the care of your practice population and in the reporting of quality of care measures.
7. Effectively educate the patient about type 2 diabetes with attention to and respect for the patient's own disease model.

Case 7: 53-year-old male with leg swelling

1. Understand the differential diagnosis of unilateral leg swelling.
2. Be able to differentiate between deep venous thrombosis (DVT), leg ulcer, and peripheral arterial disease (PAD).
3. Recognize the importance of smoking as a risk factor of vascular disease in the diabetic patient.
4. Understand the impact of socio-cultural factors on the management of chronic disease.
5. Understand the impact of obesity on health.
6. Understand the implications of DVT, its diagnosis, and management.
7. Appreciate the value of a team-based approach to chronic disease management.

Case 8: 54-year-old male with elevated blood pressure

1. Define the nationally accepted guidelines for screening, diagnosing, and staging the severity of hypertension (i.e., pre-hypertension, essential hypertension, and resistant hypertension).
2. Name appropriate elements of the hypertensive patient history to identify lifestyle and other cardiovascular risk factors, and assess concomitant disorders that affect prognosis and guide treatment.
3. Identify appropriate elements of a comprehensive physical examination in hypertensive patients, including proper techniques in blood pressure measurement.
4. Order recommended laboratory studies on an uncomplicated new hypertensive patient on initial visits.
5. Formulate basic management plans for the longitudinal care of patients with hypertension.
6. Describe elements of lifestyle modification (including health education and behavioral change strategies) for hypertensive patients.
7. Reflect on the importance of providing socio-culturally sensitive and responsive education, counseling, and care to patients and their families.
8. Demonstrate awareness of improved patient care outcomes through effective communication with all members of the primary care team, including nutritionists, social workers, and nurses.
9. 9. Develop awareness of practicing cost-effective health care and resource allocation that does not compromise quality of care.

Case 9: 50-year-old female with palpitations

1. Identify risk factors for coronary heart disease (CHD).
2. Elicit a clear history characterizing chest pain and the predictive value of these symptoms in diagnosing the underlying cause.
3. Develop a differential diagnosis for palpitations based on an organ system approach.
4. Conduct a directed physical to search for findings to support or exclude differential diagnoses of atypical chest pain.
5. Interpret target goals for cholesterol and lipoproteins.
6. Examine the predictive role of exercise stress testing for CHD in men and women.

Case 10: 45-year-old male presenting with low back pain

1. Understand the differential diagnosis for low back pain.
2. Develop physical exam skills in evaluating low back pain.
3. Develop the skills in the diagnosis and treatment of low back pain.
4. Recognize the red flags or alarming symptoms for serious causes for low back pain.
5. Order imaging studies when indicated.
6. Prescribe appropriate treatment for back pain.
7. Refer refractory back pain for consultation and surgical intervention.

Case 11: 74-year-old female with knee pain

1. Obtain a thorough history for the chief complaint of knee pain.
2. Name the components of a thorough knee exam.
3. List a differential diagnosis for knee pain in an adult.
4. Develop an appropriate treatment plan for osteoarthritis, including medications and lifestyle modifications.
5. Recognize when imaging and referral to specialists are appropriate.
6. List the different classes of medications useful for the treatment of chronic pain, and recognize their common side effects.
7. Name the USPSTF recommendations for appropriate screenings in adults, including musculoskeletal recommendations.

Case 12: 16-year-old female with vaginal bleeding and UCG

1. Describe the essential features of a preconception consultation, including how to incorporate this content into any visit.
2. Discuss chlamydia screening.
3. Demonstrate the use of the HEEADSS adolescent interviewing technique.

4. Diagnose pregnancy: intrauterine, ectopic, and miscarriage.
5. Discuss options during an unplanned pregnancy.
6. Order initial prenatal labs.
7. Counsel pregnant patient for healthy behavior, folic acid supplementation, and immunizations.
8. Predict normal progression of symptoms and physical exam findings during pregnancy.
9. Demonstrate the workup of first trimester vaginal bleeding.
10. Demonstrate the management of a miscarriage, including the medical and social follow-up.

Case 13: 40-year-old male with a persistent cough

1. Create a differential diagnosis for a patient who presents with a persistent cough and wheezing.
2. Discuss important features of the history and physical examination that support the diagnosis of asthma.
3. Explain the key features of the history and physical examination that will determine the severity of asthma in the patient.
4. State comorbid conditions of asthma that must be addressed to help the patient control his asthma (Comorbid conditions are those which may also require treatment in order for asthma control to improve).
5. Discuss the available medications available to treat asthma.
6. Create an appropriate treatment and written asthma action plan for the patient based on his stage of severity.
7. Educate the patient on how to use a peak flow meter, inhaler, and spacer device.

Case 14: 35-year-old female with missed period

1. Establish diagnosis and timing of pregnancy, including week of gestation and estimated delivery date.
2. Describe the common symptoms of pregnancy, from diagnosis through the post-partum period.
3. Understand and describe appropriate responses to common problems that arise during pregnancy, including nausea, back pain, mood changes, and fatigue.
4. Describe and recommend appropriate preventive measures and follow-up during pregnancy, including diet, exercise, immunizations, and diagnostic testing.
5. Understand and recommend appropriate screening tests during and after pregnancy, including genetic, infectious, blood, hypertension, diabetes, domestic violence, and depression screening.
6. Define types of hypertension in pregnancy and common complications of hypertension in pregnancy.
7. Define gestational diabetes and common complications of gestational diabetes.
8. Describe and recommend appropriate history, exam, and diagnostic work-up for vaginal discharge in pregnancy.
9. Discuss common etiologies of vaginal bleeding, including placenta previa and placental abruption

10. Identify appropriate contraceptive options and preventive care in the post-partum period
11. Discuss family-centered, longitudinal perinatal care.

Case 15: 42-year-old male with right upper quadrant pain

1. To take an adequate history on a patient with RUQ abdominal pain.
2. To perform a diagnostic abdominal exam on a patient with RUQ abdominal pain.
3. To formulate a differential diagnosis on someone with right upper quadrant abdominal pain.
4. To appropriately order and interpret laboratory and radiologic tests as they relate to RUQ abdominal pain.
5. To discuss screening for substance abuse.
6. To manage someone with biliary tract disease
7. To counsel patient with alcohol abuse.

Case 16: 68-year-old male with skin lesion

1. To accurately describe skin lesions
2. To define terms that describe the morphology, shape, and pattern of skin lesions.
3. To know the treatment principles of topical corticosteroid and local and systemic antifungal agents.
4. To apply the ABCDE criteria for the evaluation of hyperpigmented lesions as possible melanoma.
5. To describe common biopsy procedures including shave biopsy, punch biopsy, incisional and excisional biopsies.
6. To discuss the treatment modalities for squamous cell carcinoma.
7. To describe the importance and methods of prevention of skin cancers.
8. To learn initial workup and management of benign prostatic hyperplasia (BPH).

Case 17: 55-year-old, post-menopausal female with vaginal bleeding

1. Define menopause and discuss common symptoms and treatment options.
2. Create a differential for postmenopausal bleeding.
3. Be able to counsel a patient about the differential, work-up, and follow-up plan for postmenopausal bleeding.
4. Discuss risk factors for osteoporosis and the recommended screening for osteoporosis.
5. Discuss the recommended cancer screening for a 50+ year-old female.
6. Discuss the risks/benefits of hormone therapy in the postmenopausal female.
7. Be able to counsel patients regarding osteoporosis prevention/treatment.

Case 18: 24-year-old female with headaches

1. Student will identify the typical presenting signs and symptoms of migraine headache and contrast these with the typical signs and symptoms of the most common and most serious causes of headache (tension, cluster, brain tumor, intracranial hemorrhage, medication use).
2. Student will obtain an appropriately focused history on a patient who presents with headache.
3. Student will perform a reliable focused neurologic exam on a patient who presents with headache.
4. Student will identify appropriate indications for ordering imaging tests on a patient who presents with headache.
5. Student will counsel a patient who presents with headache on the appropriate prevention and treatment of the headache.
6. Student will understand the importance of continuity of care when treating a patient who presents with chronic headache.
7. Student will demonstrate the use of point-of-care technology when uncertainty regarding diagnosis, appropriate evaluation, and/or treatment of a patient arises during the course of an office visit.

Case 19: 39-year-old male with epigastric pain

1. Create a differential diagnosis for a male patient who presents with epigastric abdominal pain.
2. Highlight key features of the history and physical examination that support the diagnosis of peptic ulcer disease.
3. Describe the differences in diagnostic workup and treatment for peptic ulcer disease due to *Helicobacter pylori* (*H. pylori*) versus gastroesophageal reflux disease (GERD).
4. Highlight the differences between ulcer and non-ulcer (functional) dyspepsia.
5. Outline evidence-based treatment strategies for *H. pylori* gastritis.
6. Discuss appropriateness of follow-up and testing for eradication in patients with *H. pylori* gastritis.
7. Provide an overview of potential risks and adverse events associated with non-judicious use of proton pump inhibitors (PPIs).
8. Learn basics about cultural competency and respect for patients who will require interpreter services.

Case 20: 28-year-old female with abdominal pain

1. Conduct a culturally sensitive, empathic history.
2. Be aware of the ways in which victims of violence may manifest symptoms and be alert to clues a patient may give that he/she has been a victim of intimate partner violence.
3. Have knowledge of ways to assist the patient in developing a safety plan.
4. Be aware of mandatory reporting requirements for the relevant state.
5. Be aware of local resources available to survivors of violence.
6. Understand a survivor's perspective in an abusive relationship and the barriers to his/her seeking help.
7. Apply knowledge of the differential diagnosis of abdominal and pelvic pain in evaluating the patient.

Case 21: 12-year-old female with fever

1. The student will be able to take a thorough history and perform an appropriate physical exam in the setting of an acute respiratory illness.
2. The student will be able to order appropriate diagnostic studies, if necessary, to determine cause of illness and severity of illness, and have the knowledge to treat acute respiratory infection.
3. The student will be able to accurately identify common positive findings on physical exam for pneumonia and acute respiratory infection.
4. The student will be able to calculate a body mass index, and determine the diagnosis of obesity.
5. The student will counsel a pediatric patient and his/her family regarding appropriate treatment of obesity including diet and exercise.
6. The student will be able to discuss the changing pattern of obesity and name three complications of obesity.

Case 22: 70-year-old male with new-onset unilateral weakness

1. Accurately assess signs and symptoms of transient ischemic attack (TIA) and stroke.
2. Interpret laboratory data related to patients with new onset neurological symptoms, particularly numbness or weakness in an extremity with or without accompanying speech difficulty.
3. Assess and interpret target goals for cholesterol and lipoproteins using the best available guidelines (e.g., National Cholesterol Education Program Adult Treatment Panel [NCEP ATP] III guidelines).
4. Describe the appropriate therapy for acute stroke and primary and secondary prevention of stroke.
5. Discuss the evidence for the role of lifestyle changes in prevention of stroke.
6. Discuss the side effects and costs of commonly used medications for stroke prevention and treatment.
7. Describe the importance of effective communication between physicians, students, patients, and families in the management of atherosclerotic cardiovascular disease
8. Demonstrate the ability to care for patients with coronary artery disease from diverse patient backgrounds and at different points in their illness.
9. Appropriately discuss depression with a patient.
10. Perform at least two commonly used tests to determine the functional ability of an elderly patient, e.g., the "Timed Up and Go" (TUG) test, and the Mini-Mental State Examination (MMSE).

Case 23: 5-year-old female with sore throat

1. Evaluate a patient with pharyngitis, including appropriate history and physical examination, use of clinical prediction rules and appropriate antibiotic use.
2. Know the suppurative and non-suppurative complications of Group A beta-hemolytic streptococcal pharyngitis (strep throat).
3. Understand the health maintenance visit for a 5-year-old.
4. Be able to use CDC/ACIP chart in order to determine what immunizations are required based on age of the patient.

5. Know contraindications to immunizations.
6. Understand how to diagnose Attention Deficit Hyperactivity Disorder (ADHD).
7. Understand the recommendations for screening of anemia in children.
8. Demonstrate how to calculate BMI in a child and be able to identify a child at risk for obesity.

Case 24: 4-week-old female with fussiness

1. The student will learn the fundamental components of an appropriate newborn and infant history.
2. The student will learn the differential for fussiness in a young infant and the pathophysiology of colic in infants.
3. The student will review proper physical exam techniques for a newborn and learn the basics of growth charting.
4. The student will become facile with normal newborn and young infant behavioral norms, deviations from them, and signs and symptoms of concern in evaluating a young infant.
5. The student will become familiar with the fundamentals of screening and assessment of postpartum blues and postpartum depression.
6. The student will be introduced to fundamental precepts of family systems thinking and practice supportive counseling skills which will empower parents to develop autonomy and mastery as parents.
7. The student will consider the health risk assessment of the young infant and learn the fundamentals of screening for such in the newborn period.

Case 25: 38-year-old male with shoulder pain

1. Demonstrate respect for the patient, physician preceptor, and office staff.
2. Be a motivated and integral member of the office healthcare team, partnering effectively with the patient, preceptor, and office staff.
3. Demonstrate a capacity for self-reflection and mindfulness concerning the patient's agenda, perspective and comprehension.
4. Elicit the patient's chief complaint/concern --"shoulder pain"-- in an open-ended fashion.
5. Elicit the patient's related story/narrative/HPI about their "shoulder pain" in a fashion that is appropriately detailed and inclusive of appreciating the functional impact of the patient's concern.
6. Conduct a physical examination pertaining to the patient's chief complaint of "shoulder pain" that includes and is guided by the information gained in the clinical interview.
7. Communicate to the physician preceptor the pertinent interview and examination findings and a related differential diagnosis pertaining to the patient's chief complaint of "shoulder pain" in the presence of the patient using patient-centered language.
8. Commit to an assessment and treatment plan pertaining to the patient's chief complaint of "shoulder pain" that is subject to physician preceptor review and patient partnership, providing an opportunity for ongoing learning and application.

Case 26: 55-year-old male with fatigue

1. Develop a differential diagnosis for a patient presenting with fatigue.
2. Apply a cost-effective strategy when selecting a laboratory evaluation of a patient with fatigue.
3. Articulate the U.S. Preventive Services Task Force guidelines regarding screening for common cancers among adult men and women.
4. Understand principles of clinical epidemiology relevant to screening and screening guidelines.
5. Use a patient-centered approach to counsel patients on recommended preventive services.
6. Develop an evaluation and management plan for an adult male with iron deficiency anemia.
7. Articulate a compassionate approach to delivering bad news to a patient.
8. Recognize the primary care physician's role in maintaining a longitudinal therapeutic relationship with a patient during the process of consultation and referral.

Case 27: 17-year-old male with groin pain

1. Elicit focused history of patients presenting with scrotal pain.
2. To perform proficient testicular examination and ability to elicit signs specific to identify or exclude testicular torsion.
3. Develop a differential diagnosis for adolescent male presenting with scrotal pain.
4. Order appropriate laboratory and radiological studies as it relates to the differential diagnosis of scrotal pain.
5. Learn the algorithmic approach to testicular pain.
6. Learn the management of testicular torsion.
7. Recognize STIs as a cause of testicular pain among adolescent males.
8. Learn the importance of counseling to prevent STIs.
9. Discuss epidemiology and USPSTF recommendations for screening for common testicular cancers.

Case 28: 58-year-old male with shortness of breath

1. Create a differential diagnosis for a patient who presents with shortness of breath and cough.
2. Detail key features of the history and physical exam that support the diagnosis of chronic obstructive pulmonary disease (COPD).
3. Describe an organized, effective approach for smoking cessation counseling.
4. Interpret pulmonary function test (PFT) results.
5. Outline a treatment plan for a patient with COPD.
6. Counsel a patient on the use of an inhaler.

Case 29: 79-year-old male with dementia

1. Define and differentiate among the presentations of delirium, dementia, and depression in an older adult patient.
2. Interpret at least one standardized instrument (e.g., MiniCog, Mini-Mental State Examination [MMSE] or Folstein) to screen for cognitive loss in an older adult patient for whom there are concerns regarding memory or function.
3. Assess and describe baseline functional abilities (instrumental activities of daily living, activities of daily living) in an older adult patient with altered mental status
4. Describe the differential diagnosis for acute change in mental status for a patient with dementia.
5. Recognize and assess caregiver stress and its impact on the care of a patient with dementia.
6. Discuss management options, including pharmacological, non-pharmacological, complementary therapies, and caregiver support for an older adult patient with dementia.
7. Describe therapeutic interventions to prevent or treat delirium in the hospital setting.
8. Describe role of social service, healthcare agencies, hospice, and other community organizations to provide care and assistance to older adult patients with dementia and their families.

Case 30: Labor and delivery

1. Describe the advantages of group prenatal care.
2. Diagnose active labor.
3. Appropriately interpret fetal monitoring strips using the National Institute of Child Health and Human Development (NICHD) guidelines.
4. Describe how culture and health beliefs can affect pregnancy management.
5. Understand the evaluation and diagnosis of preeclampsia, and the health disparities related to preeclampsia.
6. Describe the role of the family physician in the management of prenatal care, labor, delivery, postpartum and newborn care.
7. Demonstrate effective counseling of patients and families regarding breastfeeding and newborn anticipatory guidance related to breastfeeding.

Case 31: 66-year old female with shortness of breath

1. Define nationally accepted guidelines for assessing risk of developing Coronary Artery Disease (CAD). Apply risk assessment to the individual patient.
2. Define necessary elements of the History of Present Illness (HPI) and Past Medical History (PMHx) in a patient having a high risk of CAD and presenting with symptoms and signs consistent with new onset Congestive Heart Failure (CHF).

Determine psycho-social events/stressors that have had an impact on the patient's recent behaviors, affecting the management of health problems. Model the interviewing approach to establishing an empathic connection with the patient, and delineate the advantages of this approach.

3. Identify and describe the necessary elements of the physical exam (PE) in a patient with suspected CAD/CHF. Explain the significance of positive findings.
4. Formulate the differential diagnosis of the most likely precipitating factors of CHF, considering the history and presentation of the identified patient.
5. Develop a diagnostic testing strategy for a patient at risk of CAD, presenting with shortness of breath, and interpret the test results.
6. Develop a patient-centered strategy for counseling a patient about lifestyle changes and management goals to reduce the risk of CAD.
7. Reflect on your own personal reactions to the patient during the interview. Consider the benefits of self-knowledge to future patient interactions. Model the exploration of problem-solving solutions which will be acceptable to the provider and the patient, for use when the patient has not been adherent to treatment plans.

Case 31: 66-year-old female with shortness of breath

1. Define nationally accepted guidelines for assessing risk of developing Coronary Artery Disease (CAD). Apply risk assessment to the individual patient.
2. Define necessary elements of the History of Present Illness (HPI) and Past Medical History (PMHx) in a patient having a high risk of CAD and presenting with symptoms and signs consistent with new onset Congestive Heart Failure (CHF).
3. Determine psycho-social events/stressors that have had an impact on the patient's recent behaviors, affecting the management of health problems. Model the interviewing approach to establishing an empathic connection with the patient, and delineate the advantages of this approach.
4. Identify and describe the necessary elements of the physical exam (PE) in a patient with suspected CAD/CHF. Explain the significance of positive findings.
5. Formulate the differential diagnosis of the most likely precipitating factors of CHF, considering the history and presentation of the identified patient.
6. Develop a diagnostic testing strategy for a patient at risk of CAD, presenting with shortness of breath, and interpret the test results.
7. Develop a patient-centered strategy for counseling a patient about lifestyle changes and management goals to reduce the risk of CAD.
8. Reflect on your own personal reactions to the patient during the interview. Consider the benefits of self-knowledge to future patient interactions. Model the exploration of problem-solving solutions which will be acceptable to the provider and the patient, for use when the patient has not been adherent to treatment plans.

Case 32: 33-year-old female with painful periods

1. List the risk factors for dysmenorrhea.
2. Describe the appropriate history and physical and laboratory work up of a patient with dysmenorrhea.
3. Describe normal and abnormal physical examination findings on a pelvic exam.
4. Create an appropriate differential diagnosis for a patient with dysmenorrhea.
5. Describe the treatment of dysmenorrhea.

6. Explain the definition of menorrhagia.
7. Discuss the evaluation of a patient with possible premenstrual syndrome (PMS).
8. List the treatment options for a patient with PMS.
9. Describe the use and insertion for the progestin only intrauterine device (IUD) in a patient with dysmenorrhea.

Case 33: 28-year-old female with dizziness

1. Recognize and identify common causes of upper respiratory infections (URI).
2. Discuss appropriate use of antibiotics in the treatment of URI.
3. Counsel patients regarding appropriate therapeutic measures for URI.
4. Understand effective and empathic strategies for communicating with patients and families with stressors and from diverse cultural backgrounds.
5. Incorporate knowledge about culture and its impact on the health of patients and families into the treatment plans.
6. Identify, differentiate, and discuss the common causes and treatment options for vertigo, presyncope and disequilibrium.
7. Discuss history and physical characteristics that correlate with different causes of dizziness.
8. Discuss specific exam maneuvers and the significance of physical exam findings for the diagnosis vertigo.
9. Recognize signs and symptoms of dizziness that may indicate serious disease.
10. Identify indications for use of neuroimaging in evaluation of dizziness.
11. Recommend cause-specific treatment for common causes of vertigo.

Case 34: Evaluation and Care of the Newborn Infant

1. Identify the known benefits of feeding human breast milk to infants.
2. Understand the important elements of a prenatal history as they relate to the health of the unborn child, including the importance of maternal age.
3. Recognize factors in the perinatal and newborn history that may put a neonate at risk for medical problems.
4. Identify intrauterine factors that affect the growth of the fetus.
5. Demonstrate knowledge of the indication for newborn screening for TORCH infections, including human immunodeficiency virus (HIV).
6. Understand factors that affect maternal-to-fetus HIV transmission and those that play a role in the prevention of vertical HIV transmission.
7. Identify the key concepts used in the clinical evaluation of gestational age and stability at birth (e.g., the Ballard score and Apgar score). Use weight and gestational age to categorize potential clinical problems.

8. Identify what medications are routinely given to all newborns (e.g., vitamin K, hepatitis B vaccine, eye infection prophylaxis).
9. Identify the common etiologies for small-for-gestational-age (SGA) infants.
10. Recognize the salient physical findings of congenital cytomegalovirus (CMV) infection and name potential long-term complications associated with this condition.

Case 35: Infant Well Child (2, 6 and 9 Months)

1. Recognize appropriate growth patterns in infants up to 9 months of age using standard growth charts.
2. Know the nutritional requirements for appropriate growth for infants at ages 2, 6, and 9 months, including caloric requirements, differences between formula and breast milk, and how and when to add solid foods to the diet.
3. Recognize the difference between expected developmental milestones (surveillance) and standardized tools (screening). Use the Parents' Evaluation of Developmental Status (PEDS) or other screening test to evaluate the developmental milestones of the patient at 2, 6, and 9 months.
4. Recognize the importance of prevention and anticipatory guidance during the well visits, including behavior, development, safety and immunizations.
5. Develop a differential diagnosis for an asymptomatic abdominal mass and formulate a plan for evaluation.

Case 36: 3-Year-old Well Child Check

1. Describe the key components of a toddler well-child visit, including:
 - The importance of identifying parent concerns in order to set priorities for the visit effectively.
 - The role of the physician in guiding parenting skills through affirming and validating parent's efforts and recommending and facilitating modifications in parenting and behavior.
 - Nutritional assessment and recommendations for diet and feeding behaviors.
 - Assessment of dental health and common factors leading to childhood caries.
 - Methods for performing developmental assessment screening tests and developmental surveillance.
 - Methods for performing a physical examination tailored to the age and mood of the child.
 - Topics for anticipatory guidance, such as safety.
2. List key developmental milestones for children between the ages of 3 and 5 years old.
3. Identify eczema and discuss first-line therapy.
4. Discuss the common causes and work-up of anemia in an otherwise healthy child, as well as first-line therapy of iron-deficiency anemia.

Case 37: 8-Year-Old Well Child Check

1. Understand the factors that contribute to childhood obesity.
2. Understand health implications of childhood obesity.

3. Recognize the typical presentation of attention-deficit hyperactivity disorder (ADHD) in children.
4. Understand conditions that contribute to a child's failure in school.
5. Understand the initial evaluation of childhood hypertension.
6. Appreciate the routine components of a health maintenance visit for a school-aged child.

Case 38: 6-Year-Old with Chronic Cough

1. Obtain a focused and relevant history for a chief complaint of chronic cough.
2. Describe the relevant physical exam findings in a complete pulmonary examination.
3. Discuss the relevant differential diagnosis for chronic cough in a school-aged child.
4. Understand the concept of atopic diathesis and its relationship to allergies and asthma.
5. Discuss the basics of management of allergic rhinitis.
6. Know the relevant work-up for a patient suspected of having asthma.
7. Explain the National Institutes of Health/National Asthma Education and Prevention Program (NIH/NAEPP) asthma severity criteria and stepwise management, and apply them to a patient newly diagnosed with asthma.
8. Understand the fundamentals of an asthma action plan, including commonly used medications, peak flow monitoring, and asthma education.
9. Be familiar with Web-based asthma resources for children with asthma and their families.

Case 39: 60-year-old woman with chest pain on exertion

1. Identify the symptoms and signs of chest pain characteristic of angina pectoris.
2. Categorize the patients' symptoms as angina pectoris, atypical angina, or non-cardiac chest pain.
3. Obtain, document, and present an appropriately complete medical history that differentiates among the common etiologies of chest pain.
4. Obtain a history of a patient with chest pain that contains information about those clinical characteristics that are typical of angina pectoris and includes risk factors of coronary heart disease.
5. Perform a physical exam that includes identifying the presence of dyspnea and anxiety, obtaining accurate vital signs, and performing heart, lung, and vascular exams.
6. Order appropriate laboratory and diagnostic studies based on patient demographics and the most likely etiologies of chest pain.
7. Recommend primary and secondary prevention of ischemic heart disease through the reduction of cardiovascular risk factors (e.g. controlling hypertension and dyslipidemia, aggressive diabetes management, avoiding tobacco, and aspirin prophylaxis).
8. Prescribe appropriate anti-anginal medications when indicated and communicate potential adverse reactions.

Case 40: 45-year-old man who is overweight

1. Be aware of health implications of obesity.
2. Assess risk factors for obesity-related changes.
3. Describe possible physical findings of hypercholesterolemia.
4. List etiologies of primary and secondary dyslipidemias.
5. Describe screening recommendations for dyslipidemias in adults.
6. Understand basic management of common dyslipidemias, including therapeutic lifestyle changes.
7. Calculate daily caloric requirement to maintain weight and daily caloric requirement for weight loss.

b. Communication Skills

1. Write a coherent history and physical, or SOAP note.
1. Clearly present a patient's history and physical exam.
2. Effectively talk to patients and their families, especially in difficult situations, i.e. end of life issues.
4. Motivate and instruct patients in health promotion and disease prevention.
5. Demonstrate an understanding of how family, culture, and religious beliefs can influence healthcare decisions and outcomes.
6. Respectfully and effectively communicate issues of patient care with non-physician healthcare workers, including clergy.
7. Explain to patients and families, findings from clinical investigations, including plans for follow up, possible courses of therapy with indications, risks, and benefits, and alternatives.
8. Collaborate with fellow students, healthcare professionals, patients and families. Including strategies for teaching in small groups, especially giving feedback.

c. Professionalism

1. Demonstrate an effective physician-patient relationship to provide quality health care and understand the therapeutic role these relationships confer.
2. Understand the major obligations of physicians to their patients and show skill and service to people who come for care for a variety of reasons.
3. Demonstrate advocacy for patients over personal interests.
4. Display behaviors that foster patient trust in the physician, by appropriate dress, grooming, punctuality, honesty, respect for patient confidentiality, and other norms of behavior in professional relationships with patients
5. Converse appropriately and behave with personal integrity in all course and clerkship activities and in interactions with peers, faculty, residents, and non-physician staff and identify these interactions as analogs of future professional relationships thereby maintaining the same high standards expected in patient care.
6. Work collaboratively as members of a healthcare team in a variety of settings.
7. Demonstrate commitment to and examples of service to patients in need.
8. Recognize and accept their own limitations in knowledge and clinical skills and commit to continuously improve their knowledge and ability.

d. Patient Care

1. Perform, record, present and interpret a complete screening physical exam.
2. Effectively observe, communicate, and interact with patients, families, and other healthcare workers to obtain histories, deal with difficult situations, and insure proper record keeping.
3. Integrate data from the history, physical, and laboratory to construct a problem list, develop a prioritized differential diagnosis along with therapeutic, diagnostic, and patient education plans for each problem identified.
4. Make clinical decisions and solve problems using deductive reasoning based on data obtained about the patient, principles of clinical epidemiology, and evidence-based medicine.
5. Construct appropriate management strategies (diagnostic, therapeutic and behavioral) for common conditions, both acute and chronic
6. Develop care plans for patients with chronic conditions not amenable to immediate cure, including: rehabilitative services, care of chronically disable persons and patient facing the end of life.
7. Interpret the results of the most frequent commonly used clinical laboratory tests.
8. Perform relevant routine clinical exams and procedures including:
 - a. Breast Examination
 - b. Testicular Examination
 - c. Pelvic examination and PAP smear
 - d. Skin exam
9. Exhibit an understanding of how to perform database retrievals, retrieve patient-specific information, select and use information technology, and employ electronic communications for the direct care of patients.

e. Practice Based And Lifelong Learning

1. Demonstrate knowledge of specific topics related to students' patients and use the medical literature to gather relevant information for patient care.
2. Use information technology to access and manage clinical information and perform on-line searches to support ongoing self-directed learning.
3. Search, evaluate, and critically review scientific evidence appropriate to the care of individual patients or as an approach to a clinical problem
4. Demonstrate an understanding of the variations in physician behavior for common conditions, the importance of developing evidence-based practice methodology to lessen variations, the role of practice pathways to manage common problems, and the need to individualize recommendations for the patient.
5. Formulate questions regarding outcomes seen in patient care and consider simple methods of quality improvement including improved patient satisfaction, decreased complication rates, improved clinical outcomes, and improved access to healthcare for patients from underserved groups.
6. Demonstrate a commitment to identifying errors in medicine, reasons for errors, and develop basic strategies to reduce medical errors.
7. Demonstrate a plan for professional growth.

f. Social And Community Context Of Healthcare

1. Demonstrate an understanding that some individuals in our society are at risk for inadequate healthcare, including the poor, uninsured, underinsured, children, unborn, single parents, elderly, racial minorities, immigrants, refugees, physically disabled, mentally disabled, chemically dependent, and those with incurable diseases.

2. Demonstrate an understanding of the impact of economic and health insurance issues on patient care.
3. Under supervision, develop diagnostic and treatment strategies that are cost-effective, sensitive to limited resources, and do not compromise quality of care.
4. Appropriately recommend use of consultants and referrals.
5. Demonstrate knowledge of non-biological determinants of poor health including child abuse, domestic violence, and the economic, psychological, social, and cultural factors that contribute to their development and continuation.
6. Demonstrate an understanding of economic, psychological, social, and cultural factors that impact patient health.