

| Cardiology Goals | Objectives by Competency and Level of Training | | | Assessment Methods |
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| | PL-1 | PL-2 | PL-3 | |
| GOAL 1: Prevention, Counseling and Screening. Understand the role of the pediatrician in preventing cardiovascular disease, and in counseling and screening individuals at risk for these diseases. | Patient Care: 1. Offer cardiovascular risk prevention counseling to all patients and parents and routinely screen for cardiovascular disease to identify individuals at increased risk. 2. Identify risk factors and provide information to patients and families regarding atherosclerotic heart disease and hypertension (family history or genetic predisposition to heart disease, lifestyle issues such as weight control, diet, exercise, and tobacco use). 3. Provide regular screening for prevention of heart disease and hypertension (regular monitoring and plotting of BMI, cholesterol and lipid screening as indicated, and periodic blood pressure measurement) | Patient Care: 1. Provide cardiovascular preventive counseling to parents and patients with specific cardiac diseases about: <ul style="list-style-type: none"> • Indications, duration, and appropriate antibiotic regimens for bacterial endocarditis prophylaxis • Indications and appropriate antibiotic treatment for rheumatic fever prophylaxis • Routine influenza and pneumococcal immunization in children with cardiac disease 2. Understand the mechanism for the production of heart sounds and murmurs and differentiate between physiologic (normal, functional or innocent) and pathologic heart murmurs | Patient Care: Interpret clinical and laboratory tests to identify cardiovascular disease, including: pulse and blood pressure monitoring, chest X-ray interpretation, pulse oximetry, hyperoxia test, electrocardiography, ECG monitoring reports and echocardiography reports | Direct Observation Global Evaluation |
| | Medical Knowledge: 1. Describe normal perinatal circulation and changes at birth and during the first year of life 2. Describe age-related changes in heart rate and blood pressure, including normal ranges from birth through adolescence | | Medical Knowledge: Describe the principles of electrocardiography, including normal voltages and rhythms. Differentiate normal from abnormal rhythms and voltages that suggest cardiovascular disease | Direct Observation In-Training Exam |
| | | | Systems Based Practice Identify the role and general scope of practice of pediatric cardiologists; recognize situations where children benefit from the skills of specialists trained in the care of children; and work effectively with these professionals in the care of children with congenital heart disease and other cardiovascular disease processes | 360° Feedback Direct Observation |
| GOAL 2: Diagnose and manage cardiovascular conditions that do not require referral. 1. Tachycardia related to fever 2. Peripheral pulmonic stenosis 3. Functional (innocent) heart murmur 4. Small, hemodynamically insignificant and closing VSD 5. Small, hemodynamically insignificant and closing PDA within the neonatal period 6. Musculoskeletal chest pain 7. Mild hypertension 8. Premature atrial contractions 9. Benign premature ventricular contractions | Patient Care: 1. Obtain accurate, relevant history efficiently, demonstrating a developmentally appropriate and prioritized approach 2. Perform accurate, targeted but thorough PE which is developmentally appropriate 3. Synthesize all available clinical information into a treatment plan | Patient Care: 1. Obtain relevant historical subtleties that inform and prioritize differential diagnoses and diagnostic information 2. Accurately track changes in PE over time 3. Develop a prioritized differential diagnosis and diagnostic and therapeutic plan | Patient Care: Role model gathering subtle and reliable information from patient and family 1. Routinely identify subtle or unusual PE findings, demonstrating an understanding of how they influence clinical decision making 2. Modify differential diagnosis and therapy based upon clinical course | Direct Observation Global Evaluation |
| GOAL 3: Recognize and initiate therapy in patients with cardiovascular conditions that require consultation or referral. 1. Hypertension, moderate and severe 2. Supraventricular tachycardia 3. Bradycardia 4. Congestive heart failure 5. Cardiovascular collapse 6. Cardiovascular syncope 7. Chest pain associated with exercise 8. Pathologic heart murmurs 9. Myocarditis/cardiomyopathy 10. Kawasaki disease 11. Acute rheumatic fever 12. Bacterial endocarditis 13. Essential hypertension 14. Long QT Syndrome 15. Complete atrioventricular block 16. Ventricular tachycardia 17. Congenital heart disease for initial diagnosis and follow-up <ul style="list-style-type: none"> • Ventricular septal defect • Atrial septal defect • Tetralogy of Fallot • Patent ductus arteriosus • Coarctation of the aorta • Transposition of great vessels • Tricuspid atresia • Pulmonary atresia • Hypoplastic left heart • Aortic stenosis • Pulmonic stenosis • Total anomalous pulmonary venous return • Mitral valve prolapse • Truncus Arteriosus • Atrioventricular canal | Patient Care: Create a strategy to determine if the following presenting signs and symptoms are caused by a cardiovascular disease process, and determine if the patient should be treated or needs referral to a subspecialist <ul style="list-style-type: none"> • Shortness of breath • Chest pain • Cyanosis • Syncope • Wheezing • Apparent life threatening event • Failure to thrive • Exercise intolerance • Unexplained tachypnea, dyspnea • Palpitations • Abnormal heart sounds | Patient Care: 1. Understand the presenting symptoms, signs/physical findings, pathophysiology, treatment and prognosis for congenital cardiovascular conditions, and initiate work up and management in consultation with a cardiologist 2. Describe the association of congenital heart disease with following genetic syndromes | Patient Care: Understand the presenting signs and symptoms, physical findings, pathophysiology, treatment and prognosis for the following acquired cardiovascular conditions and initiate work up and management in consultation with a cardiologist | Direct Observation Global Evaluation |
| | | Medical Knowledge Compare the commonly used cardiovascular medications, considering indications and contraindications for use, mechanism of action and side effects | Medical Knowledge Identify the indications, contraindications, mechanism of action and side effects of the commonly used cardiovascular drugs (antiarrhythmic, chromotropes, inotropes, diuretics, vasodilator, vasopressors) | Direct Observation In-Training Exam |