

### **Pediatrics Rotation Learning Outcomes:**

Upon completion of the Peds Rotation, the clinical year PA student will possess **the knowledge, clinical and technical skills, interpersonal skills, professional behaviors, clinical reasoning and problem-solving abilities** necessary to demonstrate entry-level proficiency through demonstration of the following:

To obtain the following RLO's, students participate in clinical care of patients requiring assessment and management of acute, chronic and preventative health encounter types in a pediatrics outpatient setting.

1. Identify normal patterns of physical, cognitive and behavioral growth with consideration of age-appropriate developmental milestones during preventive care in infants, children, and adolescents.
2. Obtain a thorough history based on the patient's chief complaint or clinical presentation.
3. Perform an age-appropriate problem-focused or comprehensive physical exam based on the patient's chief concern.
4. Verbally communicate relevant findings of the history and physical exam to the preceptor.
5. Develop an appropriate differential diagnosis for common presenting concerns in a pediatric outpatient setting.
6. Order and interpret laboratory and diagnostic studies for common pediatric health concerns as well as routine well child care.
7. Develop treatment plans for common chronic problems seen in pediatric patients, to include pharmacotherapy, lifestyle modifications, rehabilitative care, non-pharmacologic interventions, patient education, and follow-up evaluation.
8. Develop plans for routine preventive care in the pediatric patient, including appropriate immunizations, appropriate screening and management recommendations based on health risk, age-appropriate anticipatory guidance, and patient education.
9. Identify patients and/or criteria that would warrant referral to emergent or inpatient care.
10. Recommend medications based on indication, patient profile, potential adverse effects, and drug interactions.
11. Observe, assist with and perform common procedures performed in the pediatric setting, including administration of immunizations.
12. Document a patient encounter in an outpatient pediatric setting.
13. Develop and inform patients of treatment, screenings and immunization recommendations utilizing evidence-based medicine.
14. Write a prescription for a pediatric medication with consideration of child's weight and age in determining dosage and formulation.

15. Identify indications for referral when specialist consultation is needed to meet the medical, surgical or psychological needs of a patient.
16. Effectively communicate with children and their caregivers in a patient-centered manner.
17. Demonstrate appropriate professional demeanor, ethics, and respect for patients, families, and healthcare team members.
18. Demonstrate respect for patient rights to individuality and privacy by treating confidential information with professional discretion.
19. Demonstrate appropriate response to feedback.
20. Demonstrate an ability to collaborate with other healthcare professionals to provide patient-focused care.

### **Instructional Objectives for Pediatrics**

**Under appropriate preceptor supervision, by the end of this rotation, the clinical PA student will be able to demonstrate knowledge and competence pertaining to each of the Instructional Objectives (IOs are observable actions or behaviors) listed below in a pediatric population of infants, children, and adolescents with acute, chronic, emergent, and/or preventive presentations:**

### **History Taking and Physical Exam Skills: The student should be able to demonstrate competency in the following:**

1. Conducting focused and comprehensive interviews of pediatric patients based on presenting complaints
2. Identifying pertinent historical information, including history pertaining to prenatal and perinatal, feeding, growth and developmental milestones, past illness, immunization status, diet, sleep habits, safety issues, and substance use/exposures
3. Correlating current complaint with presented history and review of systems
4. Performing focused or comprehensive age-appropriate physical examinations
5. Performing physical exam techniques pertinent to the patient's chief complaint
6. Identifying normal and abnormal physical examination findings, with attention to growth charts
7. Identifying developmental milestones, with understanding of normal and abnormal variations
8. Applying APGAR scores, Dubowitz gestational age evaluations, Denver developmental screenings, and Tanner sexual maturity ratings

### **Developing a differential diagnosis: The student should be able to demonstrate competency in the following:**

1. Presenting to the preceptor the significant history as it relates to possible differential diagnosis

2. Presenting to the preceptor the significant physical exam findings as they relate to possible differential diagnosis
3. Formulating a differential diagnosis with consideration to the most likely diagnosis, the most common diagnosis, as well as the most severe and/or life threatening diagnosis in a pediatric patient

**Selecting and Interpreting Laboratory and Diagnostic Studies: The student should be able to demonstrate competency in the following:**

1. Identifying indication for initial and subsequent diagnostic or laboratory studies
2. Selecting appropriate common screening tests, including vision and audiometry screens, for medical conditions encountered
3. Identifying cost effectiveness, benefits, contraindications, sensitivity and specificity, and informed consent for diagnostic studies or procedures.
4. Explaining risks associated with diagnostic studies or procedures to the patient/caregiver
5. Identifying normal and abnormal laboratory/diagnostic ranges and results for studies
6. Performing the lab and diagnostic studies safely and with appropriate technique
7. Interpreting results of lab and diagnostic studies correctly

**Developing, Documenting, and Executing an Assessment and Plan: Student should be able to demonstrate competency in the following:**

1. Correlating lab and diagnostic data to the differential diagnosis to help select the most likely diagnosis
2. Demonstrating safe and accurate skill while performing procedures
3. Developing pertinent non-pharmacologic management plan including referrals to specialists, community resources, behavioral and/or psychological interventions
4. Documenting the patient encounter using SOAP note or site-specific template including patient education and follow-up recommendations
5. Providing and documenting patient/caregiver counseling and anticipatory guidance education that is patient-centered, culturally sensitive and inclusive to ensure patient/caregiver's understanding of the plan, including:
  - a. Health prevention such as nutrition, safety: car seats/seatbelts/helmets, domestic violence screen, and substance use/exposure screen
  - b. Physical activity and exercise modifications
  - c. Plan for age-appropriate screenings and periodic health assessments, including adolescent screening for sexual development, pregnancy, birth control, substance use, suicide, eating disorders, and depression
  - d. Adjustments to lifestyle changes related to: ADLs, physical/mental impairment, sexuality and relationships, culture and diverse backgrounds, socioeconomics and health literacy, violence/assault/safety, rehabilitative care, palliative care, death and dying

- e. Attention to body, soul, and spirit with consideration of and sensitivity to patient/caregiver's religious/spiritual beliefs, health practices, and lifestyle choices
6. Recognize and report signs of possible child abuse.

**Developing and Documenting Pharmaceutical Therapeutics and Treatment Modalities: The student should be able to demonstrate competency in the following:**

1. Discussing rationale for utilization of each drug with understanding of:
  - a. Mechanism of action
  - b. Indications for use
  - c. Contraindications
  - d. Side effects
  - e. Adverse reactions
  - f. Potential for drug-drug interactions
  - g. Therapeutic effects
  - h. Dosing
  - i. Cost-effectiveness
  - j. Drug toxicity
  - k. Identify risks for, and signs and symptoms of drug interactions from polypharmacy
  - l. Methods to reduce medication errors
  - m. Cross-reactivity of similar medications
2. Selecting appropriate pharmacologic therapy for common pediatric medical conditions encountered, with attention to mg/kg/day dosing and route
3. Identifying indications and contraindications for routine immunizations
4. Reviewing patient's current pharmacologic regimens and adjusting as appropriate
5. Managing adverse drug reactions
6. Determining appropriate medications and utilizing appropriate resources
7. Documenting orders and prescriptions for treatment medications

**Applying Basic Science Concepts: The student should be able to demonstrate competency in the following:**

1. Identifying normal and abnormal human anatomy and physiology to correlate how it applies to conditions encountered, with understanding of genetic anomalies
2. Correlating pathophysiologic principles to specific disease processes, with attention to common pediatric illnesses including (but not limited to) streptococcal pharyngitis, RSV, epiglottitis, bronchiolitis, pneumonia, asthma, laryngotracheobronchitis, mono, otitis media, diarrhea, vomiting, and fever
3. Correlating abnormal physical exam findings to a given disease process
4. Applying abnormal results of diagnostic tests to a given disease process

**Professionalism: The student should be able to demonstrate competency in the following:**

1. Demonstrating sensitivity to the emotional, social, and ethnic background of patients and caregivers
2. Demonstrating respect for the privacy and confidentiality of each patient
3. Communicating and interacting professionally with other members of the healthcare team.
4. Identifying limitations and willingness to seek help from supervising preceptors, and referencing appropriate resources.
5. Demonstrating an openness to receiving constructive criticism
6. Initiating independent outside research concerning clinical cases encountered
7. Performing duties with a professional attitude in such areas as attendance, dress code, and demeanor