

University of South Florida

Pediatric Orthopaedics – PGY 3

Competency Based Goals & Objectives

Competency 1- Patient Care: Provide family centered patient care that is developmentally and age appropriate, compassionate, and effective for the treatment of health problems and the promotion of health.

1. Hone skills in identifying key history and exam needed to evaluate children presenting with conditions involving the musculoskeletal systems.
2. Understand the scope and use of diagnostic studies typically used by pediatric orthopedists.
3. Discuss and identify how the pediatric orthopedist and his/her care team involves the patient and family in decision making about complex diagnoses and highly sophisticated medical care issues.
4. Screen for developmental dysplasia for the hip in the newborn nursery and at appropriate health maintenance visits:
 - a. Use competent physical examination techniques.
 - b. Use radiographs and ultrasonography appropriately.
 - c. Educate parents about the rationale for screening and referral.
 - d. Refer when indicated.
 - e. Introduce parents to the management options that the orthopedist may offer.
5. Screen for scoliosis on routine examinations (by exam and scoliometer) and refer as needed.
6. Screen for occult dysraphism.
7. Counsel families regarding risks and prevention of orthopedic injuries sustained from play near motor vehicles, lawn mowers, snow blowers, farm equipment, bicycles, snowmobiles, motorbikes and all-terrain vehicles.
8. Advise family about optimal weight and style of backpacks in order to prevent back injury.
9. Order and interpret (with the assistance of the radiologist) common diagnostic imaging procedures when evaluating and managing patients with orthopaedic conditions: plain radiographs, body MRI, CT scan, radionuclide bone scans.
10. Recognize and manage the following conditions, with appropriate referral for physical therapy services for rehabilitation when indicated:
 - a. Calcaneal apophysitis
 - b. Clavicular fracture
 - c. Annular ligament subluxation/nurse maid's elbow
 - d. Elbow medial epicondyle apophysitis/little league elbow
 - e. Erb's palsy for Klumpke's palsy
 - f. Femoral anteversion and retroversion
 - g. Pes planus (flat feet)
 - h. Internal and external tibial torsion
 - i. Low back strain
 - j. Metatarsus adductus
 - k. Muscle strains
 - l. Non-displaced finger and toe fractures
 - m. Tibial tuberosity apophysitis (Osgood-Schlatter Disease).
 - n. Overuse syndromes
 - o. Patellofemoral Syndrome
 - p. Inversion/eversion ankle sprains

- q. Thrower's shoulder/epiphysiolysis
 - r. Soft tissue contusion
 - s. Subluxation of the patella or shoulder
 - t. Rotator cuff injury/tendonitis
11. Recognize, provide initial management of the following conditions:
- a. Avascular necrosis of the femoral head/Legg-Calve-Perthes disease
 - b. Signs of child abuse
 - c. Cervical spine injury
 - d. Compartment syndrome
 - e. Talipes equinovarus
 - f. Developmental dysplasia of the hip
 - g. Fractures and dislocations not listed above, including stress fractures
 - h. Knee ligament and meniscal tears or disruptions
 - i. Limb length discrepancies
 - j. Osteochondritis dis secans
 - k. Osteomyelitis
 - l. Scoliosis with >20 degree curve
 - m. Septic joint
 - n. Slipped capital femoral epiphysis
 - o. Spondylolysis or spondylolisthesis
 - p. Subluxation of the knee or shoulder
 - q. Benign and malignant bone tumors
12. Develop the expected level of proficiency in the following procedures:
- a. Immobilization techniques for common fractures and sprains
 - b. Reduction of nursemaid's elbow
 - c. Cervical spine immobilization
 - d. Reeducation of phalangeal dislocation

Competency 2 – Medical Knowledge: Understand the scope of established and evolving biomedical, clinical, epidemiological and social-behavioral knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge needed by a pediatrician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.

- 1. Demonstrate knowledge of normal variations in foot, knee and leg development.
- 2. Know normal variations in gait and posture.
- 3. Demonstrate if the following presenting signs and symptoms are caused by an orthopaedic condition, and if so, treat appropriately:
 - a. Limp
 - b. Musculoskeletal pain
 - c. Refusal to walk or gait disturbance
 - d. Refusal to use a limb
 - e. Swollen or painful joint
 - f. Bowed legs or knock-knees
 - g. In-toeing or out-toeing
- 4. Identify the role and general scope of practice of pediatric orthopedists; recognize situations where children benefit from the skills of specialists training in care of children; and work effectively with these professionals in the care of children with orthopedic conditions.

5. Develop an efficient approach to finding information resources related to the musculoskeletal system (e.g. information on the web, in the literature, text books, or PDA's) to obtain rapid information that is relevant to a presenting patient problem.
6. At the beginning and end of a rotation or clinical experience, clarify your learning needs related to this subspecialty.

Competency 3 – Communication Skills: Demonstrate interpersonal and communication skills that result in information exchange and partnering with patients, their families and professional associates.

1. Talk to family members about sensitive issues that relate to a patient's illness, e.g. coping with the child's altered needs in his/her home setting.
2. Write an effective and timely consultation note that summarizes the findings and recommendations of the pediatric orthopedist and clarifies the continued role and responsibility of the consultant.
3. Describe the role of all members of a multi-disciplinary team and show respect for the contributions of each.
4. Maintain comprehensive, timely and legible medical records.

Competency 4 – Practice Based Learning and Improvement: Demonstrate knowledge, skills and attitudes needed for continuous self-assessment, using scientific methods and evidence to investigate, evaluate and improve one's patient care practice.

1. Identify standardized guidelines for diagnosis and treatment of complex problems of the musculoskeletal system and learn the rationale for adaptations that optimize treatment.
2. Identify personal learning needs, systematically organize relevant information resources for future references, and plan for continuing data acquisition if appropriate.
3. Seek and incorporate feedback and self-assessment into a plan for professional growth and practice improvement (e.g. use evaluations provided by patients, peers, superiors and subordinates to improve patient care).

Competency 5 – Professionalism: Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles and sensitivity to diversity.

1. Be honest and use integrity in your professional duties.
2. Reflect on your own biases toward particular illnesses or patient groups, and take steps to assure that these biases don't interfere with the care you deliver.
3. Appreciate the psychosocial impact of diseases commonly seen by the subspecialist (e.g. on the child, family, parents' work, school).
4. Respect your patients'/parents' privacy, autonomy and need to maintain a positive self-concept, irrespective of age, gender or health belief system, and regardless of acuity of diseases.
5. Be sensitive to the ethical and legal dilemmas faced by providers working with patients with orthopedic problems. Strive to understand how the orthopedist and care team deals with these dilemmas and use such experiences to enhance your own understanding.

Competency 6 – System-Based Practice: Understand how to practice quality health care and advocate for patients within the context of the healthcare system.

1. Describe school-based scoliosis screening programs and the benefits and inherent limitations of such strategies.
2. Clarify how documentation and billing charges differ for consultations vs. referrals vs. on-going management of children treated on the pediatric orthopedic service.
3. Explore the difference between fee-for-service referrals and managed care referrals and the office systems needed to support both.
4. Describe patient and system factors that contribute to escalating costs of care in the subspecialty setting, and consider the impact of these costs on families and on the health care system.
5. Recognize and advocate for families who need assistance to deal with systems complexities, such as lack of insurance, multiple medication refills, multiple appointments with long transport times or inconvenient hours of service.
6. Support community prevention efforts related to pediatric orthopaedics by working with a local professional organization or organizing a project to do with colleagues.
7. Consider potential sources of medical error in this subspecialty setting (e.g. drug interactions, complex care plans, provider fatigue).