

University of South Florida

Spine Orthopaedics – PGY 4

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 patients presenting with spine conditions.
2. Understand the scope and use of diagnostic studies typically used by orthopedists who specialize in spine conditions.
3. Discuss and identify how the 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 scoliosis on routine examinations (by exam and scoliometer) and refer as needed.
5. Screen for occult spinal dysraphism.
6. Counsel patients regarding risks and prevention of spinal injuries sustained from accidents.
7. Order and interpret (with the assistance of the radiologist) common diagnostic imaging procedures when evaluating and managing patients with spinal conditions: plain radiographs, body MRI, CT scan, radionuclide bone scans.
8. Recognize and manage the following conditions, with appropriate referral for physical therapy services for rehabilitation when indicated:
 - a. Low back pain
 - b. Cervical strain
 - c. Headache
 - d. Herniated disc
 - e. Neck pain
 - f. Sciatica
 - g. Spondylolisthesis

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. Become proficient in the anatomy of the cervical, thoracic, and lumbar spine.
2. Demonstrate the physical examination of cervical, thoracic, and lumbar spine. Perform neurologic exam of the upper and lower extremities.
3. Understand surgical approaches to all spine anatomy: anterior, posterior, and lateral.
4. Understand the basics of surgical planning for spinal reconstructive procedures.
5. Gain experience and become capable of spine exposure and closure.
6. Demonstrate ability to harvest iliac crest bone graft.
7. Be able to describe and understand use of basic spine surgery instruments.
8. Understand non-operative treatment options for patients with axial and/or radicular pain for all spine areas.
9. Understand and describe surgical indications for various spinal conditions.
10. Be able to recognize and diagnosis all true spinal emergencies.
11. Gain experience in reviewing and correlating symptomatology with plain x-rays, CT scans, MRI's, and myelograms.

12. Understand and describe basic surgical procedures performed for degenerative pathology of cervical, thoracic, and lumbar spine.
13. Finish reading listed as required and assigned.
14. Understand and describe various categories of spinal pathology.
15. Understand which patients meet criteria for surgery.
16. Describe nature of fixation points such as hooks, wires, and screws.
17. Be capable of teaching junior residents all objectives of PGY-3 spine service.
18. Gain basic knowledge of kerrison and posterior decompressions for mainly degeneration, tumor, and fracture within the cervical, thoracic, and lumbar spine.
19. Emphasize and describe basics of degenerative, fracture, and tumor management.
20. Understand and describe basic and most common fractures of cervical, thoracic, and lumbar spine.
21. Understand and be capable of placing Halo to stabilize patients.
22. By the end of rotation be capable of performing lumbar microdiscectomy, 1-level lumbar laminectomy, 1-level fusion procedure in lumbar/cervical spine.
23. Understand and describe rationale for anterior versus posterior approaches to patients with spinal trauma.
24. Be capable of evaluating, diagnosing, and properly treating peri-operative complications.
25. Understand basic concepts of spinal deformity surgery.

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 patient's altered needs in his/her home setting.
2. Write an effective and timely consultation note that summarizes the findings and recommendations of the orthopedist and clarify 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 spine 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. family, patients' work, school).

4. Respect your 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 spine problems.
6. 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. Clarify how documentation and billing charges differ for consultations vs. referrals vs. on-going management of patients treated on the spine service.
2. Explore the difference between fee-for-service referrals and managed care referrals and the office systems needed to support both.
3. 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.
4. 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.
5. Support community prevention efforts related to pediatric orthopaedics by working with a local professional organization or organizing a project to do with colleagues.
6. Consider potential sources of medical error in this subspecialty setting (e.g. drug interactions, complex care plans, provider fatigue).