

# University of South Florida

## MSK Radiology– PGY 1

### 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. Communicate effectively with patients, referring clinicians, technologists and supervisory staff.
2. Obtain essential patient information pertinent to the radiologic exam.
3. Demonstrate standard radiographic positioning and anatomy.
4. Generate accurate and concise radiographic reports.
5. Demonstrate knowledge of clinical indications for radiography and indications for urgent computed tomography (CT) and magnetic resonance (MR) exams.
6. Dictate timely notes.
7. Arrives prepared with the most recent data available.

**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 as a physician; demonstrate the ability to acquire, critically interpret and apply this knowledge in patient care.

1. Describe pertinent normal anatomy in an MSK radiograph.
2. Be familiar with the commonly used musculoskeletal radiographic projections and the purpose of each.
3. Recognize and describe, in a systematic fashion, radiographic findings in an MSK radiograph.
4. Provide an accurate description of a fracture involving either the peripheral or axial skeleton.
5. Identify, with a high level of accuracy, most types of bone fractures.
6. Describe the stages of fracture healing
7. Discuss the imaging findings of septic arthritis, osteomyelitis, and metastatic diseases.
8. Evaluate orthopedic follow-up imaging.
9. Discuss the imaging findings of post-operative orthopedic hardware complications.
10. State the indications for CT, MRI, arthrography, and bone scans in MSK imaging.
11. Discuss the imaging findings and provide an appropriate differential diagnosis for:
  - a. Articular diseases
  - b. Benign and malignant bone tumors

c. Metabolic and endocrine diseases

d. Pagets, AVN, anemias

e. Soft tissue lesions

f. Common Congenital syndromes

12. Know the normal MRI anatomy of the knee and shoulder

13. Recognize basic internal arrangement of the knee on MRI

14. Diagnose rotator cuff tear on MRI

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

1. Ethically manage patient confidentiality information and medical record according to HIPPA standards.
2. Effectively communicate with the patient about positioning and the radiographic experience.
3. Write an effective and timely consultation note that summarizes the findings and recommendations.
4. Describe the role of all members of a multi-disciplinary team and show respect for the contributions of each.
5. Maintain comprehensive, timely and legible medical records.
6. Effectively provide information via various communication mediums.
7. Demonstrate effectively listening skills.

**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 and learn the rationale for adaptations that optimize treatment.
2. Identify personal learning needs, strengths, deficiencies and limits in ones knowledge and expertise.
3. Systematically organize relevant information resources for future references, and plan for continuing data acquisition if appropriate.
4. 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).
5. Educate patients, families, students and or other health professionals in regards to the patient's condition.
6. Apply information from medical literature in the care of patients; this includes ability to assess statistical validity of published studies.

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

1. Recognizes and follows role as part of care team.
2. Be honest and use integrity in your professional duties.
3. Demonstrate responsiveness to patient's needs that supersedes self interest.
4. Demonstrate appropriate dress and decorum while on duty; conversations in public places to be free of patient information.
5. Respond to criticism and correction with calm and attentive demeanor.
6. Respect your patient's privacy, autonomy and need to maintain a positive self-concept, irrespective of age, gender or health belief system, and regardless of acuity of diseases.
7. Consistently report to duty on time.

**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 each radiographic exam.
2. Describe patient and system factors that contribute to escalating costs of care, and consider the impact of these costs on families and on the health care system.
3. Incorporates considerations of cost awareness and risk benefit analysis in patient care.
4. Demonstrate an understanding for various health funding systems including private insurance, Medicare, Medicaid, Workers Compensation, PPO, HMO and Vocational Rehabilitation.