

# University of South Florida

## Adult Reconstruction – PGY 5

### 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.

*The educational objectives for the Senior Resident is to build upon the foundation of knowledge gained during the PGY 2&4 rotation. The resident is expected to develop the knowledge base and skills to assess and treat more complex adult reconstruction pathology. The resident will learn the surgical skills to manage typical adult reconstruction operative cases. The resident will also be responsible for the preparation of the patient for surgery and the post-operative management of the surgical patients.*

1. Hone skills in identifying key history and exam needed to evaluate patients presenting with conditions involving the musculoskeletal systems.
2. 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.
3. Order and interpret radiographs when evaluating and managing patients with orthopaedic conditions: plain radiographs, body MRI, CT scan, radionuclide bone scans.
4. Evaluate and treat painful total joint replacements.
5. Develop knowledge and understanding implant materials to include Metal Alloys, Polyethylene, Polymethylmethacrylate, and Ceramics
6. Demonstrate competency in primary and revision total joint arthroplasty techniques.
7. Demonstrate competency and understanding in the following:
  - a. Surgical exposures in revision hip arthroplasty
  - b. Complication in total hip replacement; their prevention, recognition and management of dislocation, mechanical failure; loosening and wear
  - c. Osteolysis; pathophysiology, treatment and prevention
  - d. Revision total hip replacement
  - e. Femoral component considerations in revision total hip replacement
  - f. Acetabular component considerations in revision total hip replacement
  - g. Structural bone grafting in revision hip surgery
  - h. Treatment of deep infection complicating total hip arthroplasty
  - i. Hip osteotomy
  - j. Hip resurfacing
  - k. Revision total knee replacement
  - l. Complications in total knee replacement; prevention, recognition and management
  - m. Extensor mechanism complications
  - n. Diagnosis and treatment of infection complicating total knee arthroplasty
  - o. Nonarthroplasty alternatives in knee arthritis
  - p. Alternative Bearing Surfaces
  - q. Surgical exposures in revision knee arthroplasty
  - r. Structural bone grafting in revision knee arthroplasty
8. The resident will attend all teaching conferences; to include Grand Rounds and the Core Curriculum
9. The resident will assist in the instruction of the junior residents and medical students on the Service

**Outpatient:**

1. Evaluate new patients and present these patients to the attending orthopaedic surgeon
2. Obtain appropriate history, perform physical exams, evaluate imaging studies and formulate a plan.
3. Dictate findings to the point of official recommendation and the plan, which will then be made by the attending orthopaedic surgeon.
4. Perform outpatient procedures such as aspiration and injections of the knee under the attending orthopaedic's supervision.

**Inpatient:**

1. The senior resident will assist the junior resident and make morning and afternoon rounds on all patients
2. The senior resident will supervise in house call on a rotating basis
3. The resident will seek appropriate consultation from other services when the patient's condition warrants this
4. Effectively supervise postoperative complications of primary and revision total hip and total knee arthroplasty.

**Operative:**

1. The resident will adequately prepare for all surgical cases in which he/she will participate
2. The resident will assist in the operating room as assigned
3. Perform all or part of the operative procedure under supervision or semi-independently deemed appropriate by the orthopaedic attending.

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

1. Demonstrate knowledge of hip and knee implant design and anatomy of the hip and knee.
2. Demonstrate knowledge of revision surgical approaches and procedures.
3. Demonstrate knowledge of diagnosis and treatment of hip pain in symptomatic total hip replacements.
4. Demonstrate knowledge of preoperative templating techniques.
5. Identify signs and symptoms for knee or hip surgery and treat appropriately:
  - a. Severe knee pain that limits your everyday activities, including walking, going up and down stairs, and standing up from a chair. You may find it hard to walk more than a few blocks without significant pain and you may need to use a cane or walker. Moderate or severe knee pain while resting, day or night.
  - b. Chronic knee inflammation and swelling that doesn't improve with rest or medications.
  - c. Knee deformity a bowing in or out of your knee.
  - d. Knee stiffness inability to bend and straighten your knee.
  - e. Failure to get pain relief from non-steroidal anti-inflammatory drugs. These medications, including aspirin and ibuprofen, often are most effective in the early stages of arthritis. Their effectiveness varies from person to person and may become less effective for patients with severe arthritis.
  - f. Severe osteoarthritis, degenerative joint disease, inflammatory arthritis or continual and progressive discomfort and pain throughout the hip.
  - g. Hip pain that can no longer be managed through other treatments; pain while using the leg in normal activities, particularly intense pain while climbing or descending stairs, or during movements that put increased pressure on the hip.
  - h. Discomfort or pain after sitting or keeping the leg and hip motionless for an extended period of time.
  - i. Stiffness, which increases after the hip has remained motionless.
  - j. Pain at night.
6. Identify the role and general scope of practice of an orthopedist; recognize situations where patients benefit from the skills of specialists training, and work effectively with these professionals in the care of patients with knee and hip conditions.

7. 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.
8. 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 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 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.
5. Effectively provide information via various communication mediums.
6. 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 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).
4. Obtain and use information about the patient's population and the larger population from which patients are drawn.
5. Effectively teach general concepts and core curriculum to medical students.
6. Teach and mentor junior residents on the service.

**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 family, patients' work, school).
4. Respect your patients' 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. Clarify how documentation and billing charges differ for consultations vs. referrals vs. on-going management of adult reconstructive patients.
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).
7. Demonstrate an understanding for various health funding systems including private insurance, Medicare, Medicaid, Workers Compensation, and Vocational Rehabilitation.