

SPORTS MEDICINE ROTATION-SPECIFIC OBJECTIVES

PATIENT CARE

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Clinical Year 2 and 3 Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families.
- Gather essential and accurate information about patient.
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.
- Develop and carry out patient management plans, counsel and educate patients and their families.
- Provide written operative plans to the attending physician prior to scheduled surgeries.
- Use information technology to support patient care decisions and patient education.
- Perform competently all invasive procedures considered essential in sports medicine practice.
- Provide health care services aimed at preventing health problems or maintaining health work with health care professionals, including those from other disciplines, to provide patient-focused care.
- Communicate with primary care physicians and make referrals to appropriate other specialists.

Surgical skills are learned and are to show progressive responsibility and skill.

The clinical year 2 resident will:

- Demonstrate competence in performing the described task.
- Appreciate the pitfalls and possible complications
- Surgical planning
- Prepping and draping
- Patient positioning and injury prevention
- Implant selection/management/utilization
- Basic arthroscopic navigation
- Arthroscopic triangulation and instrument utilization
- Basic arthroscopic skills in meniscal surgery, ACL, subacromial decompression
- Arthroscopic suture management
- Arthroscopic knot tying
- Suture selection
- Pain management
- Postoperative rehabilitation

The clinical year 3 resident will master the above plus:

- Identify the appropriate surgical approach
- Describe potential pitfalls
- Outline the operative procedure

- Identify required equipment
- Perform the appropriate parts of the procedure
- Increased participation in advanced procedures (ACL, rotator cuff repair, shoulder stabilization, hip arthroscopy, multi-ligamentous knee injury)

Surgical	Arthroscopic Surgery
Removal of hardware – superficial	SHOULDER Diagnostic arthroscopy
Removal of hardware – deep	Arthroscopic capsulorrhaphy
Shoulder	Repair of SLAP lesion
Claviclectomy; partial	Removal of loose body/foreign body
Acromioplasty; partial, w or w/o coracoacromial ligament release	Synovectomy – partial
Rotator cuff repair – acute, open	Synovectomy – complete
Rotator cuff repair – chronic, open	Debrid glenohumeral joint – limited
Release/transfer of coracoacromial ligament (Weaver-Dunn)	Debrid of glenohumeral joint – ext
Biceps, long head tenodesis	Distal clavicle resection
Bankart procedure	Lysis of adhesions (+/- manipulation)
Capsulorrhaphy, glenohumeral joint, any type multidirectional instability	Subacromial decompression
Hemiarthroplasty (not fracture care)	Rotator cuff repair
Total shoulder arthroplasty	ELBOW Diagnostic arthroscopy
Clavicle ORIF	Removal of loose body/foreign body
Open treatment of AC dislocation	Synovectomy – partial
Thigh/Knee Joint	Synovectomy – complete
Arthrotomy w/removal of loose/foreign bodies	Debridement – limited
Suture of infrapatellar tendon; primary	Debridement – extensive
Suture of infrapatellar tendon; secondary, incl fascial or tendon graft	KNEE SCOPES with int/ext fixation of intercondylar spines
Quadriceps tendon repair – primary	Treatment of tibial plateau – Unicondylar
Quadriceps tendon repair – secondary +/- ORIF	Treatment of tibial plateau – bicondylar
Repair of ligaments - Collaterals	Knee, osteochondral autograft(s)
Repair of ligaments – Cruciates	Knee, osteochondral allograft
Repair of ligaments – Collaterals/Cruciates	Knee, meniscal transplantation, medial or lateral
Autologous chondrocyte implantation, knee	Diagnostic knee arthroscopy
Osteochondral allograft	For infection, lavage & drainage
Tibial tubercleplasty	Lateral release
Osteotomy, proximal tibia, incl. Fibular excision or osteotomy; after epiphyseal closure	Removal of loose bodies/foreign body
Patella ORIF	Synovectomy/plica resection – limited (1e plica)
Open treatment of dislocation - +/- ORIF	Synovectomy/plica resection – major
Open treatment of dislocation w/primary ligament repair	Chondroplasty/debridement
Open treatment of dislocation w/primary ligament reconstruction	Abrasion arthroplasty/micro fracture
Manipulation of knee, under general anesthesia	Medial and lateral meniscectomy
Fasciotomy – anterior/lateral compartment	Medial or lateral meniscus repair
Fasciotomy – posterior compartments	Lysis of adhesions
Fasciotomy – anterior/lateral compartment	OCD lesions – with bone graft
Fasciotomy – posterior compartment(s)	OCD lesions – drill only
Fasciotomy – anterior/lateral and posterior	OCD lesions – drill and w/internal fixation

Achilles tendon repair – primary	ACL reconstruction
Achilles tendon repair – primary w/graft	PCL reconstruction
Achilles tendon repair – 2ondary reconstruct	ANKLE Diagnostic arthroscopy
Wound vac \leq 50 sq cm	Partial Synovectomy
Wound vac $>$ 50 sq cm	Partial synovectomy
	Debridement – limited
	Ankle arthrodesis
	HIP Diagnostic arthroscopy
	Synovectomy
	Loose body removal
	Labral repair/debridement
	Cam/pincer impingement care

MEDICAL KNOWLEDGE

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g. epidemiological) sciences and the application of this knowledge to patient care.

Clinical Year 2 and 3 Residents are expected to:

- Demonstrate an investigatory and analytic thinking approach to clinical situations.
- Know and apply the basic and clinically supportive sciences which are appropriate to sports medicine and upper extremity surgery.
- Prepare for and participate in indications conference
- Read and discuss assigned weekly articles
- Participate in monthly cross-department conferences
- Prepare and discuss cases for M&M conference
- Obtain a focused Patient History
- Perform an appropriate Physical Examination (knee, shoulder, hip, ankle)
- Identify normal and abnormal post operative recovery
- Order and appropriately interpret relevant x-rays that may include:
 - Shoulder series
 - Knee series
 - Hip/pelvis series
 - Other relevant xrays
- Know the indications and basic interpretation of the following imaging studies:
 - CT Scan
 - MRI
 - Bone Scan
 - Long leg alignment film and other diagnostic tools

For the specific sports medicine conditions listed below the resident will:

- Make an accurate **diagnosis**
- Competently perform any relevant **physical examination**
- Identify appropriate radiographic **imaging studies**
- Outline the **etiology**, or possible etiologies, of the specific condition
- Outline the **natural history** of the specific condition

- Describe appropriate **non-operative treatment options** (if they exist)
- Describe appropriate **operative treatment options** (if they exist)
- Describe possible **complications** of non-operative and operative treatment
- Outline the **prognosis** of non-operative and operative treatment

For the general or systemic problems listed below the resident will:

- Demonstrate an understanding of the pathophysiology
- Identify how this condition may affect management of specific problems
- Demonstrate an understanding of appropriate treatment principles
- Recommend appropriate patient referral when indicated

1. Injuries of the Head and Spine
 - a. Cervical spine injuries
 - b. Lumbar spine injuries
 - c. Head injuries in athletics/Concussion/Second Impact Syndrome
2. Upper Extremity
 - a. Integrated biomechanics of the hand/elbow/shoulder
 - b. Acute shoulder injuries
 - i. Anterior instability
 - ii. Posterior instability
 - iii. Superior labral injuries
 - iv. Acromioclavicular injuries
 - v. Relevant muscle/nerve/bone injuries
 - c. Chronic shoulder injuries
 - i. Multidirectional instability
 - ii. Rotator cuff injuries
 - iii. Impingement issues
 - d. Overuse elbow injuries
 - e. Acute elbow injuries
 - f. Hand and wrist injuries
 - g. Rehabilitation principles
3. Lower Extremity
 - a. Hip and groin injuries/Labral Tears, FAI
 - b. Posterior cruciate ligament injuries
 - c. Anterior cruciate ligament injuries
 - d. Collateral ligament injuries
 - e. Posterolateral corner injuries
 - f. Multiligamentous knee injuries
 - g. Meniscal injuries
 - h. Patellofemoral disorders (pain and instability)
 - i. Articular cartilage lesions
 - j. Overuse syndromes
 - k. Athletic ankle injuries
 - l. Athletic foot injuries
4. Systemic injuries
 - a. Ligamentous injuries
 - b. Stress fractures and stress injuries in bone
 - c. Muscuotendinous injuries

- d. Genetic Syndromes
- 5. Medical disorders in athletes
 - a. Infectious diseases
 - b. Dermatologic problems
 - c. Cardiopulmonary disease
 - d. Nutrition and eating disorders
- 6. Selected sports medicine issues
 - a. Performance enhancing supplements
 - b. Female athlete triad
 - c. Epidemiology and prevention of sports injuries

PRACTICE-BASED LEARNING AND IMPROVEMENT

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Both Clinical Year 2 and 3 Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information, and support their own education.
- Facilitate the learning of students and other health care professionals

INTERPERSONAL AND COMMUNICATION SKILLS

Resident will at all times demonstrate behavior that is beyond reproach. Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates. Clinical Year 2 Residents are expected to:

- Learn honest, open, civil, and effective communication with patients, staff, and colleagues (medical students, residents, attendings).
- Create a therapeutic and ethically sound relationship with patients
- Learn effective listening skills.
- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a member of a health care team or other professional group
- Learn appropriate postoperative rehabilitation protocols by discussion with physical and occupational therapists

Clinical Year 3 Residents are expected to:

- Demonstrate honest, open, civil, and effective communication with patients, staff, and colleagues (medical students, residents, attendings).

- Sustain a therapeutic and ethically sound relationship with patients and staff with whom they worked previously
- Demonstrate effective listening skills.
- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.
- Work effectively with others as a senior member or leader of a health care team or other professional group
- Demonstrate appropriate postoperative rehabilitation protocols by discussion with physical and occupational therapists and writing appropriate prescriptions

PROFESSIONALISM

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Clinical Year 2 and 3 Residents are expected to:

- Demonstrate respect, compassion, and integrity
- Be honest and show integrity in all professional duties
- A responsiveness to the needs of patients and society that supersedes self-interest
- Commitment to excellence and on-going professional development
- Demonstrate a commitment to ethical principles pertaining to:
 - provision or withholding of clinical care
 - confidentiality of patient information
 - informed consent
 - business practices
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

SYSTEMS-BASED PRACTICE

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Clinical Year 2 and 3 Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice.
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources.
- Practice cost-effective health care and resource allocation that does not compromise quality of care.
- Advocate for quality patient care and assist patients in dealing with system complexities
- Participate in high school sports medicine physical exams to assess, coordinate and improve health care and know how these activities can affect system performance.
- Provide cost effective care to orthopedic patients. Understand indications for ordering a study and that if the outcome will not change management, it is not indicated.
- Effectively communicate with athletic trainers, therapists, coaches, and other involved members of the patient's care while abiding by patient confidentiality.