Longitudinal Sports Medicine Experience
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Last review/update: 2/2017

The Sports Medicine experience includes a required 1-week block experience completed in the 1st month of the PGY-1 year followed by monthly half-day Sports Medicine experiences over the remaining 35 months of training. Training takes place in the Sports Medicine Practice within the Residency Family Medicine Clinic. Fellowship trained Sports Medicine faculty will precept and instruct the residents. There is content overlap with the Orthopaedic rotation.

ACGME Competencies and FM-Specific Milestones Assessed:

1. ***Patient Care*** that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health
   - ✓ ***PC-1***
2. ***Medical Knowledge*** about established and evolving biomedical, clinical, and cognate (e.g. epidemiological and social-behavioral) sciences and the application of this knowledge to patient care;
   - ✓ ***MK-1***
3. ***Practice-Based Learning and Improvement*** that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, and improvements in patient care;
   - ✓ **PBLI-2**
4. ***Interpersonal and Communication Skills*** result in effective information exchange and teaming with patients, their families, and other health professionals;
   - ✓ ***C-3***
5. ***Professionalism*** as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population;
   - ✓ ***PROF-2***
6. ***Systems-Based Practice*** as manifested by actions that 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.
   - ✓ ***SBP-4***

Family Medicine Program Requirements:

IV.A.6.i): *"Residents must have at least 200 hours (or two months) dedicated to the care of patients with a breadth of musculoskeletal problems.*
IV.A.6.i).(1): *This experience must include a structured sports medicine experience."*

Competency-Based Objectives and Instructional Methods

A. Patient Care (PC-1)

Objectives

During supervised clinical practice in the Sports Medicine Practice, residents must demonstrate ability to:

1) Perform a history and conduct a physical exam appropriate for the musculoskeletal system
2) Identify appropriate laboratory testing and/or imaging to order for initial diagnosis of common Sports Medicine diseases
3) Manage initial medical treatment of common Sports Medicine disorders
4) Counsel patients appropriately regarding risks and benefits of common medications and procedures used to treat Sports Medicine pathology

Instructional Methods

1) *Direct Instruction:* by Sports Medicine faculty during rotation in the Sports Medicine Practice as well as select Academic Conference sessions
2) *Faculty Modeling:* of relevant behaviors and techniques by Sports Medicine faculty
3) *Guided Research:* resident presentation of faculty-assigned topics based upon clinical cases
4) *Supervised Clinical Management***:** Application of information to individual patient cases in the Sports Medicine practice

B. Medical Knowledge (MK-1)

Objectives

In the appropriate setting, the resident should demonstrate the ability to apply knowledge of:

1) Normal musculoskeletal anatomy and physiology
2) Normal musculoskeletal growth and development
3) Musculoskeletal history taking
4) Principles of musculoskeletal physical examination
5) Indications, contraindications, and interpretation of laboratory data (e.g., joint fluid)
6) Testing
    a. Interpretation of radiographs
    b. Use of magnetic resonance imaging (MRI), computed tomography (CT) scanning, bone scanning, and musculoskeletal ultrasound
    c. Indications for arthrogram, myelogram, and contrast imaging
    d. Indications for electromyography (EMG) and nerve conduction studies

7) Pathogenesis/pathophysiology and recognition of:
    a. Joint pain, swelling, and erythema
    b. Muscular pain, swelling, and injury
    c. Musculoskeletal trauma
    d. Fractures
    e. Dislocations
    f. Tendinopathy
    g. Tendon ruptures (partial and complete)
    h. Nerve injuries
    i. Bone and joint deformities
    j. Bone and joint infections
    k. Metabolic bone diseases
    l. Musculoskeletal congenital anomalies
    m. Musculoskeletal birth injuries
    n. Compartment syndrome
    o. Avascular necrosis
    p. Osteoporosis
    q. Overuse syndromes
    r. Back pain syndromes
8) Pediatric problems
    a. Hip dislocation
    b. Congenital hip dysplasia
    c. Legg-Calvé-Perthes disease
    d. Apophysitis
    e. Slipped capital femoral epiphysis
    f. Clubfoot (talipes equinovarus)
    g. Intoeing (metatarsus adductus, tibial torsion, femoral anteversion)
    h. Bowleg (genu varum) and knock-knee (genu valgum)
    i. Physeal injuries (Salter-Harris classification)
    j. Transient synovitis
    k. Child abuse patterns of injury
    l. Dislocation of the radial head (nursemaid's elbow)
    m. Thoracolumbar scoliosis
9) Sports Medicine-specific considerations
    a. General considerations
    b. Ethical, psychosocial, economic, and medicolegal issues

c. Interaction with members of the Sports Medicine team
d. Nutrition, fluids and electrolytes, and dietary supplements
e. Injury prevention

1. Discouraging use of improper techniques
2. Promoting rule changes and enforcement of rules designed to enhance participant safety
3. Proper equipment, fit, and maintenance
4. Taping, strapping, and bracing techniques
5. Environmental factors affecting participant and spectator safety

f. Conditioning and training techniques, including principles of aerobic and resistance training
g. Appropriate exercise prescription for:
    1. Healthy persons of all ages, taking into account physiologic differences related to age and sex
    2. Patients who have chronic illnesses, including diabetes, hypertension, congestive heart failure, asthma, and chronic obstructive pulmonary disease
    3. Pregnant women
    4. Physically or mentally challenged athletes
    5. Patients who have various cardiovascular conditions, especially those known to increase the risk of sudden death
h. Sports Medicine education promotion for patients and their families, athletes and their families, allied health professionals, coaches, and school administrators
i. Patient care aspects
    1. The important role of family physicians as part of a team of physicians for organized sports
    2. The role of family physicians as medical directors and/or on-site medical care providers for mass participation sporting events
    3. Appropriate assessment and care of acutely injured athletes, including, but not limited to:
        a) Evaluation, on-field management, and transport of suspected cervical spine injury
        b) Evaluation, and on-field and sideline management of suspected concussion or other head injury
        c) Evaluation, on-field management and transport of severe fractures and dislocations
    4. Medical management of ill and injured athletes, taking into account important sport-specific considerations
    5. Rehabilitation oversight for ill and injured athletes, and return to play decision making
j. Medical care considerations for special athlete groups
    1. Preadolescent athletes
    2. Adolescent athletes
    3. Female athletes
    4. Geriatric athletes

5. Physically challenged athletes
6. Student athletes
7. Recreational athletes
8. Athletes who have chronic diseases

k. Communication and interaction with patients and their families, athletes and their families, coaches, and school administrators
l. Exercise-induced asthma testing
m. Understanding of cardiac screening for exercise-related cardiac problems

10) Problems associated with exercise
a. Exercise addiction
b. Abuse of anabolic steroids and other performance-enhancing drugs
c. Pressures placed on athletes by themselves, family members, teammates, coaches, and fans to participate even when injured
d. Performance pressures placed on athletes by themselves, family members, teammates, coaches, and fans
e. The intermittent exerciser
f. How to deal with unmet and unrealized expectations
g. Alcohol and illicit drug use and abuse
h. Eating disorders

11) Management and therapy
a. Outline of expected course with and without therapy
b. Patient education for acute and chronic problems
c. Targeted pharmacologic treatment
d. Supportive/corrective devices, including braces, casts, splints, and orthotics
e. Complementary and alternative modalities
f. Injury prevention
g. Rehabilitation
1. Physical therapy
2. Occupational therapy
3. Complementary modalities (e.g., osteopathic manipulative therapy [OMT], massage, acupuncture)

12) Procedural competency according to the Longitudinal Procedural Training Curriculum. The following list of skills are integral to this curriculum and residents should seek opportunities to train in these procedures during rotation.

A_0 Procedures Procedural competence assumed by graduating from the program	A_1 Procedures Procedural Competence is required for graduation	A_2 Procedures Procedural Competence is optional prior to graduation	B Procedures Procedural Competence requires a focused training plan during residency	C Procedures Procedural competence likely requires additional training beyond residency
• Local anesthesia/field block • Simple closed reduction of subluxed joint without sedation (e.g. nursemaid elbow or lateral patellar dislocation) • Topical anesthesia	• Digital Block (1) • Upper and lower extremity splints (1 each) • Upper and lower extremity casts (1 each) • Injection/aspiration of joint, bursa, ganglion cyst, tendon sheath or trigger point (5, including 1 knee and 1 subacromial/subdeltoid bursa)	• Reduction of shoulder dislocation (2)	• Fracture manipulation reduction • Hematoma block • Non-obstetrical, point-of-care diagnostic applications (abdominal, cardiac, musculoskeletal, ocular, pelvic, skin/soft tissue, thoracic, vascular, etc.) • Peripheral nerve block other than digital	• Acupuncture

- For A1 and A2 procedures, the minimum number of procedures that must be logged electronically prior to graduation is listed in parentheses.
- Residents should attempt to complete as many Procedural Competency Assessment Tools as possible during the rotation.

Instructional Methods

1) *Direct Instruction:* by Sports Medicine faculty during rotation in the Sports Medicine Practice, select Academic Conference sessions, sideline medicine opportunities, and community medicine events
2) *Faculty Modeling:* of relevant behaviors and techniques by Sports Medicine faculty
3) *Guided Research:* resident presentation of faculty-assigned topics based upon clinical cases
4) *Supervised Clinical Management*: application of information to individual patient cases in the Sports Medicine Practice

C. Practice Based Learning and Improvement (PBLI-2)

Objectives

During supervised clinical practice in the Sports Medicine Practice, residents must demonstrate:

1) Willingness and ability to incorporate faculty feedback into clinical/academic performance changes

2) Appropriate use of search tools online and in the Harrison Medical Center and UW Libraries to find references which augment learning from cases seen in the Sports Medicine Practice
3) Use the EPIC Electronic Health Record to facilitate patient care, including:
    a) appropriate usage of "Care Everywhere" and other resources to locate non-Harrison medical information available from external sources
    b) appropriate usage of EPIC data synthesis function/charting resources to summarize trends in patient laboratory data
    c) appropriate documentation of clinic notes and procedure notes

Instructional Methods

1) *Direct Instruction*: by Sports Medicine faculty during rotation in the Sports Medicine Practice, select Academic Conference sessions, and new-resident orientation (EPIC training)
2) *Faculty Modeling:* of relevant behaviors and techniques by Sports Medicine faculty
3) *Guided Self-Study:* Supplemental activities as provided by the faculty to demonstrate effective usage of research and EHR resources
4) *Supervised Clinical Management:* Application of information to individual patient cases supervised by Sports Medicine faculty

D. Interpersonal and Communication Skills (C-3)

Objectives

During supervised clinical practice in the Sports Medicine Practice, residents must demonstrate:

1) The ability to present cases clearly and concisely to precepting faculty
2) Rapport with patients and/or family members to promote the patient's welfare, employing active listening techniques to clarify information
3) Effective communication with non-physician health-care team members
4) The ability to determine appropriate type and length of follow-up for patients who have been seen in the Sports Medicine Practice
5) The ability to complete appropriately-organized, thorough, and timely Electronic Health Record documentation

Instructional Methods

1) *Direct Instruction:* by Sports Medicine faculty during rotation in the Sports Medicine Practice, and select Academic Conference sessions
2) *Faculty Modeling:* of relevant behaviors and techniques by Sports Medicine faculty
3) *Supervised Clinical Management:* Application of information to individual patient cases supervised by Sports Medicine faculty

E. Professionalism (PROF-2)

Objectives

During supervised clinical practice in the Sports Medicine Practice, residents must demonstrate:

1) Ethical behavior and the humanistic qualities of respect, compassion, integrity, and honesty in all patient/staff interactions
2) Willingness to acknowledge errors (when committed) and perform self-analysis to avoid future similar mistakes
3) Punctuality and reliability at all times; whether in clinic, didactic sessions, or performing inpatient care
4) A professional appearance at all times

Instructional Methods

1) *Direct Instruction:* by Sports Medicine faculty during rotation in the Sports Medicine Practice, and select Academic Conference sessions
2) *Faculty Modeling:* of relevant behaviors and techniques by Sports Medicine faculty
3) *Supervised Clinical Management:* Application of information to individual patient cases in the Sports Medicine Practice

F. Systems Based Practice (SBP-4)

Objectives

During supervised clinical practice in the Sports Medicine Practice, residents must demonstrate:

1) Appropriate utilization of health care services and professionals within CHI-Franciscan Health Care system while advocating for patient interests (Examples include: nutritionists, physical/occupational therapists, specialists, and ancillary services)
2) Advocacy for patient interests and appropriate utilization of health services and professionals in the local community when such resources are not available within the CHI-Franciscan system; use of cost effective, evidence-based, medical practices.

Evaluation Activities

Residents will receive an ***incomplete or failure*** for the rotation and will not be eligible for graduation until the following items are completed:

1) **Resident Evaluation:** *(the resident may be evaluated by one or both Sports Medicine faculty)*
   - Mid-training feedback:
     Faculty and senior residents are encouraged to provide regular verbal feedback. Written feedback is required any time the resident is in jeopardy of failing the rotation. The Family Medicine Associate Program Director or Program Director should be notified as soon as possible when a resident is in danger of failing.
   - Final Evaluation
     Use standard Family Medicine on-line evaluation form. Evaluation should be completed within two weeks of the last clinic experience to provide timely feedback to the resident.
   - Attendance Verification
     Documentation of attendance at didactic sessions, procedural clinics, FM continuity clinics and experiential encounters will be maintained in resident training file.
   - Qualification Card
     Residents must complete a qualification card documenting procedures, observed physical exams, Community participation, and didactic presentations (2).
   - Didactic Presentations
     Residents are required to give two didactic presentations during their training on an approved Sports Medicine topic.
   - Community Sports Medicine
     Residents are required to participate in 1 Sports Physical Day, 2 sideline event coverage, and 1 Community Health event to pass the rotation.
2) **Documentation:** *(to be completed by end of rotation)*
   - Procedures performed must documented in standard electronic format
   - Appropriate EHR documentation of all encounters must be completed
   - Any provided supplemental readings should be completed and returned to rotation coordinator.
3) **Faculty Evaluation:** (by the resident)
   - Residents evaluate rotation faculty using a standard on-line evaluation form. Evaluation is to be completed within two weeks of the last Sports Medicine Practice experience.
4) **Rotation Evaluation:** (by the resident)
   - Resident assesses quality of the rotation on the standard rotation evaluation form (same as for rotation faculty evaluation). Evaluation is expected to be completed within two weeks of the last Sports Medicine Practice experience.

Michael Watson, MD Date: 5/9/2018

READING LIST

PGY1

The Pre-participation Sports Evaluation
Chronic Shoulder Pain Part 1. Evaluation and Diagnosis
Chronic Shoulder Pain Part 2. Treatment
Evaluating Acutely Injured Patients for Internal Derangement of the Knee
Nonsurgical Management of Knee Pain in Adults
Corticosteroid Injections for Common Musculoskeletal Conditions

PGY2

Management of Head and Neck Injuries by the Sideline Physician
Diagnosis and Treatment of Acute Low Back Pain
Low Back Pain (Chronic)
Non-operative Management of Cervical Radiculopathy
Consensus statement on concussion in sport: the 4th International Conference on Concussion in Sport held in Zurich, November 2012
American Medical Society for Sports Medicine: Concussion in Sports

PGY3

Health-Related Concerns of the Female Athlete: A Lifespan Approach
Rotator Cuff Disease: Diagnostic Tests
Diagnosis and Management of Scaphoid Fractures
Stress Fractures: Diagnosis, Treatment and Prevention
Adolescent Idiopathic Scoliosis: Diagnosis and Management