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Appendix 1

Rotation Objectives and Schedule

1. Introductory Month – 4 weeks
2. Total Joints – 4 weeks
    a. Diagnosis and management of hip and knee arthritis
    b. Indications for surgery
    c. Implant selection; templating basics
    d. Postoperative imaging surveillance
    e. Identification, description, and management of periprosthetic fractures, dislocations, and other complications
    f. Joint aspirations and injections
    g. Attendance at weekly conference
    h. First assistant in the operating room (OR)
3. Spine – 3 weeks
    a. Diagnosis and initial treatment of common spine conditions: neck and back pain, disc herniation, sciatica, arthritic spine conditions
    b. Identification of abnormal neurologic findings that necessitate further workup
    c. Fracture management, including knowledge of appropriate spine bracing
    d. Appropriate utilization of advanced imaging for the spine
    e. Description of spine injuries and fractures, including mechanism of injuries and potentially associated conditions
    f. Attendance at spine indications conference
    g. First assistant in OR, including proper patient positioning
4. Osteoporosis and Metabolic Bone Disease – 2 weeks
    a. Educational lectures, including self-directed online learning regarding types of metabolic bone disease
    b. Identification of patients with fragility fractures and appropriate initial medical treatment
    c. Proficiency in secondary fracture prevention education and guidelines for treatment of osteoporosis
    d. Familiarity with medical conditions associated with primary and secondary osteoporosis, and interaction with rheumatology and endocrinology services
5. Orthopaedic Consults and Inpatient Management – 9 weeks
    a. Assessment of wounds around joints and fractures
    b. Laceration repair
    c. Assessment of comorbidities and effect on surgery, preoperative assessment
    d. Informed consent for procedures
    e. Joint aspiration
    f. Fracture and dislocation reductions: adults and pediatrics
    g. Splinting and casting
    h. Application of skeletal traction
    i. Identification and management of postoperative complications
    j. Wound evaluations after surgery
    k. Dressing changes and wound management, including vacuum-assisted closure

l. Understanding of care coordination and discharge planning
m. Integrated multidisciplinary team approach to management of orthopaedic patients
n. Understanding and documentation of medical comorbidities and compliance with quality measures prior to patient discharge
o. Deep vein thrombosis (DVT) prophylaxis and pain management

6. Foot and Ankle – 4 weeks
   a. Comprehensive foot and ankle examinations
   b. Diagnosis and treatment of common foot and ankle conditions: Achilles tendinitis; plantar fasciitis; posterior tibial tendon dysfunction; ankle sprains; fractures of the foot and the ankle; deformities of the forefoot, the midfoot, and the hindfoot; arthritis of the foot and the ankle
   c. Diabetic foot care and management of foot and ankle conditions in patients with diabetes
   d. Injections of the foot and the ankle
   e. Casting and splinting of the foot and the ankle
   f. Knowledge of inserts, bracing, and prosthetics in foot and ankle conditions
   g. Attendance at weekly foot and ankle conference
   h. First assistant in OR
   i. Podiatric assessments and treatment plans
   j. Referral patterns for orthopaedics vs. podiatry
   k. Prosthetics and orthotics: introduction
7. Trauma – 4 weeks
   a. Basic fracture classification
   b. Initial fracture treatment
   c. Criteria for surgical vs. nonsurgical treatment of fractures
   d. Informed consent
   e. Postfracture care, including weight-bearing status, range of motion, and prevention/identification of complications
   f. Management of wounds in trauma population: external fixation, wound management systems, skin grafts, flaps
   g. Performance of secondary examination in trauma patient
   h. Participation in multidisciplinary trauma rounds
   i. Attendance at weekly trauma conference
   j. First assistant in OR, including proper positioning and familiarity with different OR tables
8. Hand and Upper Extremity – 4 weeks
   a. Comprehensive hand, elbow, and shoulder examination
   b. Diagnosis and treatment of common hand and upper extremity disorders: carpal tunnel syndrome; trigger finger; tendinitis; fractures of the hand, the wrist, and the forearm; arthritis of the shoulder, the elbow, the wrist, and the hand
   c. Injections of the shoulder, the elbow, the wrist, and the hand
   d. Casting and splinting of the hand and the upper extremity
   e. Knowledge of bracing, splinting, and casting of the hand and the upper extremity
   f. Rehabilitation protocols for upper-extremity injuries and surgery

   g. Attendance at weekly hand conference
   h. First assistant in OR

9. Sports and Physical Therapy – 5 weeks
   a. Diagnosis and initial treatment of common sports injuries: rotator cuff, tendon and ligament tears, cartilage tears, hip injuries
   b. Understanding of injuries that require surgical referral
   c. Understanding of the role of athletic trainers and physical therapists, along with services provided
   d. Attendance at weekly sports conference
   e. First assistant in OR
10. Pediatric Orthopaedics – 4 weeks
   a. Diagnosis and initial treatment of common pediatric orthopaedic conditions: scoliosis, clubfoot, growth disturbances, limb deformity, hip dysplasia
   b. Identification and management of fractures and guidelines for surgical intervention
   c. Casting, splinting, and bracing for common pediatric conditions: hip dysplasia, clubfoot
   d. 1 week with pediatric radiology, including ultrasound
11. Radiology, Physical Medicine and Rehabilitation, Pain Management – 4 weeks
   a. Regular sessions with musculoskeletal radiology for interpretation of radiographs and advanced imaging, including computed tomography (CT), magnetic resonance imaging (MRI), and bone scan, and conference attendance
   b. Exposure to scope of practice of physical medicine and rehabilitation and to services provided to patients with orthopaedic conditions
   c. Exposure to pain management specialists, including indications for and types of chronic pain medications, image-guided advanced injections, and appropriate use of narcotic medications
   d. Dedicated time with orthotic and prosthetic services
12. Elective – 4 weeks
   a. To be coordinated with the PA Fellowship Director and the supervising provider of the chosen elective

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Appendix 2

Learning Modules

Billing and coding

- Improved understanding of appropriate practices

Quality specialist observation

- PA fellow is observed with patient and then provided feedback for improving communication and overall patient interaction

Social work/Case management

- Discussion of appropriate patient disposition plans and options for post-hospital discharge

Infection control

- Understanding of current infection-control strategies and antibiotic protocols

Wound care

- Discussion of available wound-care techniques and when to appropriately refer to wound-care services

Nutrition

- Nutrition evaluation and supplementation

Pharmacotherapy

- Pain management, anti-inflammatory medications, and anticoagulation

Physical and occupational therapy

- Understanding of what the goals of various therapy regimens are, when to refer, and how to facilitate therapeutic intervention

Prosthetics

- Understanding of types of prosthetics, which patients are candidates, and timeline for evaluation for prosthesis

Medical ethics

- Discussion of appropriate patient informed consent, research protocols, and patient power of attorney and advance directives

Leadership

- Understanding of interviewing and recruiting for fellowship positions and participation in recruitment of incoming fellow

Scholarship

- Understanding of clinical research and participation in creation of study and institutional review board application

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With the exception of scholarship, each learning module has been designed to provide 4 contact hours of face-to-face interaction with different members of the health-care team during which didactic instruction is offered, and the fellow has the opportunity to observe the role of that health-care specialist. Prereading is often required and, following the experience, the fellow is required to demonstrate (by means of assignment, checklist, etc.) knowledge that is relevant to each module. Scholarship occurs throughout the duration of the fellowship; the fellow is expected to complete a scholarly project prior to completion of the program.

Appendix 3

Procedural Competency Checklist Example

Ankle Joint Reduction and Splinting
Competency for:
Consult Rotation,
Wake Forest School of Medicine, Postgraduate Fellowship - Orthopaedic Surgery
Date: _____
Examiner: _____ Examinee: _____
The PA fellow demonstrates proficiency in the following areas of ankle reduction and splinting:
1. Verifies patient identification (ID) and date of examination on radiograph. □
2. Correctly states patient positioning and number of views. □
3. Assess orthopaedic injury appropriately. □
4. Appropriate skin, neurovascular, and strength examinations. □
5. Obtains consent and appropriate sedation with emergency department (ED). □
6. Prepares appropriate splinting supplies. □
7. Performs appropriate reduction maneuver. □
8. Holds ankle appropriately positioned/reduced while splinting. □
9. Places splint with appropriate padding and skin protection. □
10. Splint appropriately positioned with ankle reduced. □
11. Obtains appropriate postreduction imaging. □
12. Able to verbalize plan for postreduction and if redislocation occurs. □
Comments:
_____
_____
Preceptor Signature: Date
_____
Preceptor Printed Name:
_____