Rotation Specific Learning Objectives
CCFP-EM Residency Program

Orthopedics Rotation

Overall Goal:
To utilize the relevant competencies contained within the CanMEDS-FM roles to develop the skills necessary to manage common orthopedic presentations to the emergency department.

Educational Objectives:

Role of Family Medicine-Emergency Medicine (FM-EM) Expert

The FM-EM resident will develop expertise in the ability to:

- Learn the use of the diagnostic imaging modalities available for the evaluation of orthopedic disorders.
- Develop skill in the evaluation and management of musculoskeletal trauma
- Develop skill in the diagnosis and treatment of inflammatory and infectious disorders of the musculoskeletal system
- Learn principles of acute and chronic pain management in patients with musculoskeletal disorders.
- Develop ability to correctly perform a history and physical in patients with musculoskeletal disorders.
- Demonstrate ability to correctly order and interpret radiographs in patients with orthopedic injuries.
- Demonstrate understanding of the anatomy, mechanism of injury, presentations, complications, management and prognosis of common musculoskeletal injuries.
- Demonstrate knowledge of standard orthopedic nomenclature.
- Demonstrate knowledge of appropriate aftercare and rehabilitation of common orthopedic injuries.
- Demonstrate knowledge of the differences in pediatric and adult skeletal anatomy and indicate how these differences are manifest in clinical and radiographic presentations.
- Demonstrate ability to apply orthopedic devices, including casts, compressive dressings, splints and immobilizers.
- Demonstrate ability to prioritize and manage the treatment of orthopedic injuries in multiple trauma patient
- Describe the presentation of patients with inflammatory and infectious disorders and demonstrate ability to diagnose and treat them.
- Demonstrate ability to diagnose and treat soft tissue foreign bodies.
• Describe the presentations, complications, diagnosis, management and prognosis of patients with human and animal bites.
• Describe the presentations, complications, diagnosis and management of compartment syndromes.
• Demonstrate ability to provide regional anesthesia, including hematoma blocks, and radial, ulnar, median, posterior tibial and sural nerve blocks.
• Discuss the dosages, indications, contraindications and side effects of standard analgesic and sedative agents used to treat patients with acute orthopedic trauma and demonstrate skills in their use.
• Discuss the differential diagnosis, historical features, physical examination findings, diagnostic modalities and treatment of patients with low back pain.
• Demonstrate ability to recognize and treat soft tissue infections involving muscle, fascia, and tendons.
• Describe how to evaluate and preserve amputated limb parts.
• Demonstrate knowledge of joint injuries, evaluation and grading of joint injuries, treatment of joint injuries and prognosis.
• Discuss the treatment of soft tissue injuries such as strains, penetrating soft tissue injuries, crush injuries, and high-pressure injection injuries.
• Demonstrate knowledge of the anatomy and physical examination of the hand as well as treatment of simple hand injuries including lacerations, dislocations and fractures.
• Demonstrate an understanding of which orthopedic conditions warrant immediate and elective referral to an Orthopedic Surgeon.

The resident will develop expertise in the assessment and management of common emergency orthopedic presentations including:

- Dislocations - including shoulder, elbow, hip, knee, ankle, and fingers
- Fractures - basic principles of fracture management, including closed reduction of distal ulna, radius, ankle, mid-shaft humerus
- Sprains/Strains - including ankle, knee, hip, rotator cuff injury, tennis elbow, wrist, and common pediatric disorders (ie: Osgoode-Schlatter)
- Septic Joint - including the ability to perform arthrocentesis of the knee, ankle, wrist and shoulder
- Over-use syndromes
- Pediatric presentations - including hip disorders (Legg-Perthe’s, Slipped capital Femoral Epiphysis), Sever’s disease, Osgoode- Schlatter’s disease
- Orthopedic trauma - including penetrating and high-pressure injuries, crush injuries

Role of Communicator

Overall Goal

The resident will communicate effectively with members of the healthcare team. The resident will facilitate the doctor-patient relationship and establish positive therapeutic relationships with patients and their families that are characterized by understanding, trust, respect, honesty and empathy.

The resident should demonstrate expertise in the ability to:
• Rapidly establish rapport with patients and families in such a way as to efficiently and effectively delineate the nature of the problem including mechanism of injury
• Incorporate into the individual patient interaction an understanding of the human condition, especially the nature of suffering and patients' response to illness
• Overcome barriers to communication such as language, patient disabilities, cultural differences and age group differences
• Manage the difficult patient encounter
• Explain orthopedic issues in language adapted to the needs of the individual patient, including immediate and follow-up care plans
• Maintain clear (legible), accurate and concise medical records

Role of Collaborator

Overall Goal

The resident will work cooperatively with patients, families and other members of the healthcare team to achieve optimal patient care.

The resident will demonstrate expertise in the ability to:

• Participate in a team-based model in the care of emergency department and clinic-based orthopedic presentations
• Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own and consult other specialists in such a way as to respect the consultants individual skills
• Maintain respect for the principle of effective resource allocation
• The resident will function as a resource to the community as a consultant in orthopedic presentations

Role of Manager

Overall Goal:

The resident will play a central role in the organization of the care delivered to patients during their emergency department, hospital or clinic visit. They will coordinate the members of the health care system and utilize resources in a way that sustains and improves the health of their patient population.

The resident will develop expertise in the ability to:

• Allocate finite healthcare resources appropriately
• Understand the issues that affect the delivery of orthopedic care in the clinic and hospital settings
• Work collaboratively with other health care professionals and community organizations to provide coordinated care for patients
• Manage time effectively to attend to patient needs in the clinic or hospital setting and to recognize when urgent care is needed

Role of Health Advocate

Overall Goal
The resident will use their role to influence and advance the health and wellbeing of patients

The resident will develop expertise in the ability to:

- Evaluate patients with respect to determining their status regarding determinants of health and potential barriers to care in general and as it pertains to musculoskeletal disorders
- Identify and respond to the health needs of the communities that they serve including vulnerable or marginalized population
- Understand the concepts of informed consent and measurement of capacity

Role of Scholar

Overall Goal

To demonstrate a commitment to self-learning and the creation, translation, and dissemination of medical knowledge.

The resident should be able to:

- Adapt and increase their skills and knowledge to meet the needs of their orthopedic patients
- Critically appraise the literature and its relevance to their orthopedic practice
- Facilitate the medical education of patients, families, emergency department learners, health professionals, and colleagues
- Take part in clinical teaching of junior learners in the Emergency Department or orthopedic clinics
- Contribute to the creation, application and translation of new medical knowledge and practices
- Utilize local computer information systems

Role of Professional

Overall Goal

To display commitment to an ethical practice and high personal standards of behavior in a manner that is commensurate with the importance of the doctor-patient relationship.

The resident should:

- Exhibit professional behaviours in practice including honesty, integrity, reliability, compassion, respect, altruism, and a sincere commitment to patient well-being
- Be punctual for clinical and educational events
- Follow through on assigned tasks
- Demonstrate respect for colleagues and team members
- Recognize the principles and limits of patient confidentiality
- Maintain appropriate professional boundaries
- Balance personal and professional priorities to ensure personal health during the rotation
- The resident will have respect for patient autonomy as a major guiding principle in the doctor-patient relationship
• Take part in evaluation systems for learning events in order to provide/contribute feedback to colleagues/teachers