

# Orthopedic Curriculum

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### Introduction

There is an institutional need for a revitalized orthopedic surgery curriculum in our residency program. Knowledge of the musculoskeletal system is a vital component to residency training for family medicine physicians.[3] It is important that they can diagnose pathologies of the musculoskeletal system and provide proper treatments. [1]There are a wide variety of orthopedic and musculoskeletal pathologies that family medicine physicians should be able to diagnose and treat.[2]


Residents plan to practice in rural/outpatient settings



Provide a well-developed curricular that focusses on knowledge of musculoskeletal system.

The current orthopedic curriculum for our PGY2 residents does not meet the needs of our resident's education.

### Needs Assessment

 Obtained a targeted needs assessment, aimed at 3<sup>rd</sup> FM residents who have completed their orthopedic rotation. Residents completed a 7 questions survey which highlighted problems and issues with the current rotation and curriculum. The following needs have been identified:

- **62.5% (N=8)** of residents felt that there was a lack of clear expectations and learning objectives. Prior to the start of the rotation, not one resident had access or knew about the orthopedic curriculum. Knowledge of the rotation was passed down from previous upper level residents in the form of knowledge transmission.
- **87.5% (N=8)** of residents feel that the current rotation is more of a shadowing experience without an opportunity for active management of the patients.
- **50% (N=8)** of residents felt that their overall knowledge of the musculoskeletal system was not expanded after the rotation.
- **67.5% (N=8)** of residents felt that they saw limited pathology and missed out on seeing a variety of different musculoskeletal pathology.
- **37.5% (N=8)** of residents felt they could have learned or done more procedures on the rotation.
- **25% (N=8)** of residents felt that the rotation was not worthwhile.

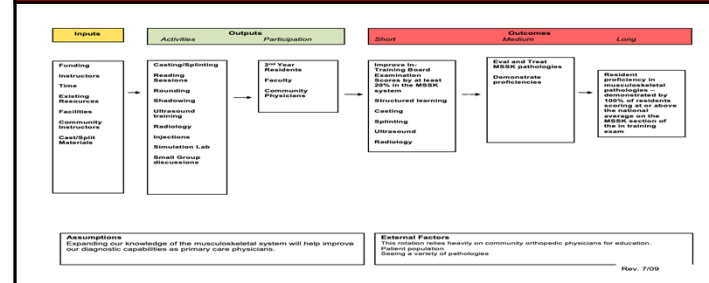
### Educational Strategies

	Cognitive Objective	Affective Objective	Psychomotor objective
Specific Measurable objectives	Assessments of common pathologies and radiological I.D. • Non-displaced fractures • Limb at risk • Displaced fractures • Dislocation • Sprains	Residents will be able rank the importance of learning how to treat musculoskeletal pathologies in a primary care setting	Demonstrate the ability to competently perform at least 3 of the following procedures: • Large joint injections • Small joint injections • Splinting • Casting • Closed fracture reduction • Buddy taping • Corticosteroid injections
Educational method to achieve	• Readings • Lectures • Online learning resources • Peer teaching • Real Life supervised experiences • Will use Bate's Guide to Physical Examination as a rubric	• Small group discussions • Reflection • Peer teaching • Real life experiences • Supervised clinical experiences • Role-model	• Real life and supervised clinical experiences • Simulation and artificial models • Role-play • Environmental interventions • Demonstration
Educational method to prevent decay	• Training skills relevant to self-directed learning • Training in teaching skills • Use of learning portfolios	• Facilitation of openness and reflection • Obtain feedback • Debriefing and replay • Use independent learning projects	• Training in Teaching skills • Video resources • Access to simulation
Resources required	• Bate's Guide to Physical Examination • Lectures and lecturers • Practice test questions • Videos lectures	• Dedicated time for discussion and reflections • Online resources • Open feedback from attendings	• Access to simulation lab and equipment • Ultrasound with appropriate probes • Casting materials • Splinting materials • Materials for injections

### Goals and Objectives

Goals	Objectives
Have clear and set expectations prior to starting rotation.	Describe or communicate goals and objectives written in syllabus
Expand to Develop Proper Examination Technique in the Orthopedic Rotation using Bates' Visual Guide to the physical examination [4]	Demonstrate ability to perform a proper orthopedic assessment and treatment plan on at least 5 common orthopedic pathologies • Non-displaced fractures – cognitive and psychomotor • Limb at risk – cognitive • Displaced fractures – cognitive and psychomotor • Dislocation – cognitive and psychomotor • Sprains – cognitive and psychomotor
Demonstrate radiological interpretations of the musculoskeletal system.	Interpret radiological findings of the following musculoskeletal pathologies: • Non-displaced fractures – cognitive • Displaced fractures – cognitive • Dislocation –cognitive • Sprains – cognitive
Procedures and skills	Demonstrate the ability to competently perform at least 3 of the following procedures: • Large joint injections – psychomotor • Small joint injections – psychomotor • Splinting – psychomotor • Casting – psychomotor • Closed fracture reduction – psychomotor • Buddy taping – psychomotor • Corticosteroid injections for various tendonopathies – psychomotor
Documentation	Demonstrate the ability to write progress notes on inpatient orthopedic patients that are comprehensive and problem oriented.

### Implementation & Logic Model



### Evaluation

- Continuing feedback throughout the rotation using the institution's online competency-based electronic resident evaluation
- Resident is to complete an end of rotation evaluation for both the rotation itself and preceptors.
- Documentation of attendance of required conferences
- Log of all performed procedures
- Residency performance feedback is sought annually during exit interviews of the graduating resident

#### References:

1. Please use a standard format when listing references.
2. Only a few of your most important references need to be listed here; not a complete list.

