

Learning Context	CanMEDS Role (s)	Learning Outcomes: Goals/Objectives	Source Doc(s)	Specific Competencies	Learning/ Teaching Strategies	Evaluation Method or Tools
The trainee will study and understand the various subspecialties of musculoskeletal (MSK) medicine relevant to the practice of Orthopaedic surgery. The trainee will attend subspecialty clinics to attain competence in the clinical evaluation and management of these patients, and provide opportunities to gain competence as a collaborator with experts in other specialties.	Medical Expert	KNOW: Rheumatologic and inflammatory conditions Attend combined ortho/rheumatology clinics	OKU: Musculoskeletal infections. Editors: C. Cierny, A.C. McLaren, M. D. Wongworawat 2010 clinical practice guidelines for the diagnosis and management of osteoporosis in Canada: Summary Thompson's Rheumatology Pocket Reference (3rd Edition) Canadian Residents' Rheumatology Handbook (First Edition edited by Dr. L. Albert) Primer on the Rheumatic Diseases 11th Edition MSK Screening Examination (pGALS) for School-Age Children Based on the Adult GALS Screen Early referral recommendation for	Be able to identify: Osteoarthritis and inflammatory arthritis (including rheumatoid arthritis) Soft tissue disorders such as bursitis, tendonitis, tenosynovitis, enthesopathy and nerve entrapment Muscle disorders of congenital, inflammatory and neurological origin Bone conditions such as malignancy and infection	Education daily log book for self reflection On-going self study and review of documents	Content reviewed questions based on AAOS exam bank and specific questions from various disciplines (inflammatory and non-inflammatory), osteoporosis and other miscellaneous disease or other generated MCQ and SAQ exam to assess cognitive knowledge. Structured oral examination for domain pertaining to infectious diseases Educational daily "log book" (Appendix 15E) Evaluation of the rotation experience and self-evaluation of performance Exit interview and review of rotation based on the above collected data

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			newly diagnosed rheumatoid arthritis: evidence based development of a clinical guide Rehabilitation medicine: 3 Management of adult spasticity Hard copy handouts provided by PMR division.			
	Medical Expert	KNOW: Neurologic conditions affecting the musculoskeletal system Attend neurology clinics		Be able to identify and diagnose: Central and peripheral nerve disorders affecting the musculoskeletal system Muscle disorders of congenital, inflammatory and neurological origin		Will be completed as a learning tool with evaluation for use/satisfaction/facts implementation built into the simulation (research tool to be validated during CBC with all orthopaedic residents provided the opportunity to participate on a "delayed exposure" basis).
	Medical Expert	KNOW:	<u>Skeletal Dysplasia and Genetics:</u>	See Appendix 15A Objectives		

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		Genetic conditions affecting the MSK system Attend combined ortho and genetic clinics at the Hospital for Sick Children	Lovell & Winter's Pediatric Orthopaedics (2 Volume Set): Syndromes and genetic disorders sections (Editors: R. T. Morrissy and S.L. Weinstein) OKU 11: Syndromes and genetic disorders sections (Dr. Mendoza to clarify)			
	Medical Expert	KNOW: Osteoporosis Attend combined ortho/endocrine clinics at St. Michael's Hospital		See Module 15 Objectives (Appendix 15A Objectives)	On-line case simulation pertaining to inflammatory arthritis and osteoporosis Participation in patient care in clinic	
	Medical Expert	DO: Perform an appropriate work up of rheumatology patients	Clinical Orthopaedic Examination by Ronald McRae (3 rd Edition), Churchill Livingstone, 1990 Practical Fracture Treatment by Ronald McRae (3 rd Edition), Churchill Livingstone, 1994	History Taking Physical Examination Interpretation of appropriate investigations (including lab, radiology and EMG/NCT reports)	Participation in patient care in clinic	

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			Physical Examination of the spine and extremities by Stanley Hoppenfeld, Appleton-Century-Crofts/Norwalk, Connecticut 1976 Orthopedic Physical Assessment by David J. Magee, W.B. Saunders Company 1987 Primer on the Rheumatic Diseases by the Arthritis Foundation Fundamentals of Skeletal Radiology by Clyde A. Helms by W.B. Saunders Company 1995 Orthopaedic Knowledge Update (MSK Infection) AAOS			
	Medical Expert	DO: Perform a complete neurological exam		See Module 15 Objectives (Appendix 15A Objectives)		
	Collaborator	Co-managing care of MSK conditions through the interaction with other	AAOS Speed CA, Crisp AJ. Referrals to hospital-	Co-managing care of MSK conditions through the interaction with	Review source documents	Clinical scenarios will be given to assess applied knowledge in the various domains of

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		healthcare disciplines Recognize when it is appropriate to obtain help from faculty when managing patients (knowing your limitations – PGY 1)	based rheumatology and orthopaedic services: seeking direction. <i>Rheumatology (Oxford)</i> 2005; 44: 469–71. Tore K Kvien and Wolfhart Puhl (2007) How important is collaboration between orthopedic surgeons and rheumatologists for optimizing the management of joint disease? <i>Nature Clinical Practice Rheumatology</i> 3, 535 http://www.nature.com/nrrheum/journal/v3/n10/pdf/ncprheum0617.pdf World Health Organization. <i>Framework for action on interprofessional education and collaborative practice</i>. Geneva: WHO Press; 2010. Freeth D, Hammick M, Reeves S, Koppel I, Barr H, Ashcroft J. <i>Effective</i>	other healthcare disciplines Incorporate the input of other relevant professionals in the assessment and management of MSK conditions Work jointly with other professionals in the implementation of specific interventions in the management plan	Resident observation of a staff specialist performing all of the specific competencies, with the opportunity for questions and discussion afterwards Staff observation of the resident performing all of the competencies, with specific and ongoing feedback provided progression towards the resident increasingly taking on the staff's role on the inpatient team, working directly with team members and liaising with other professionals outside of the treatment setting	arthritis, osteoporosis and miscellaneous diseases specifically pertaining to case presentations Observation and Feedback Residents will be evaluated according to the Educational Contract (Appendix 15B) ITER

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			<i>interprofessional education: development, delivery & evaluation.</i> Malden (MA): Blackwell Publishing; 2005. Fisher R, Ury WL. <i>Getting to yes. Negotiating agreement without giving in.</i> Boston: Houghton Mifflin Company; 1981. Hall P. Interprofessional teamwork: professional cultures as barriers. <i>J Interprof Care</i> 2005;19(Suppl 1):188–96. Review Lower Extremity Strength Program (Appendix 15C)			
	Scholar	The resident must prepare a teaching rounds on one topic pertaining to MSK medicine. This teaching rounds should critically evaluate the literature on the topic	PGCorEd Resident as Teacher and Learner Module Walbert, D. <i>Evaluating Multi Media Presentations.</i> Learn NC. http://www.learnnc.or	Demonstrate ability to develop and execute a grand rounds PowerPoint presentation on one topic pertaining to MSK medicine	On-line module which includes a series of quizzes and video's (yes, but this was not used for this cohort because of lack of funds to keep the	Evaluation form that specifically solicits feedback from multiple allied health professionals on the resident's presentation– Sample Appendix 15D

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		especially as it pertains to patient outcomes.	q/lp/pdf/evaluating-multimedia-presentations-p647.pdf Assessment/ Evaluation Form for PPP– see sample attached Appendix 15D Kristina Åkesson Karsten E. Dreinhöfer, & A.D.Woolf (2003) <i>Improved education in musculoskeletal conditions is necessary for all doctors</i>. Bulletin of the World Health Organization 81:677-683	Demonstrate an understanding of and a commitment to the need for continuous learning Critically appraise medical information and integrate information from a variety of sources as it applies to practice decisions in the clinic and OR. Facilitate the learning of medical students and other residents Demonstrate ability to ask and answer questions clearly as it relates to procedures and clinical practice	evaluation component up and running. MSKHealth.ca is the website Self-reflection Peer-to-peer assessment Critical appraisal of journal articles for specific rounds and ongoing as dictated by clinical experiences One-on-one supervision Supervision of junior residents and medical students	ITER at end of module Learning Objective Log Book