

Mapping of Knowledge, Skills and Attributes (KSA) document to SOMM Foundation in Musculoskeletal Medicine course (Level 7: 60 credits; validated by Queens Margaret University)

Fully covered
 Partially covered
 Not covered

Domain A: personalised approaches

DOMAIN A: PERSONALISED APPROACHES https://www.england.nhs.uk/personalisedcare/ Capability 1. Communication Capability 2. Personalised care				
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capabilities 1 & 2	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/not covered
A.1	Demonstrate advanced critical understanding of the processes of verbal and non-verbal communication, clinical documentation, and the common associated errors of communication e.g. use of inappropriate closed questions, appropriate use of lay and professional terminology.	D7.K1 D7.K2 D7.K3 D7.K4	This can be expanded on in clinical examination lecture, more emphasis on the communication aspect, motivational interviewing with discussion in groups about where consultations have gone well and where not gone well.	<input checked="" type="checkbox"/>
A.2	Demonstrate comprehensive advanced knowledge of the influence of the clinician's behaviour on a patient's behaviour and vice versa.	D4.K5	This can be emphasised on consultation skills.	<input checked="" type="checkbox"/>

Critical skills: Specific skills underpinning capabilities 1 & 2				
A.1 A.2	Demonstrate an advanced level in the ability to enhance and promote the rights of a person to actively participate in their healthcare management through shared decision making by taking into consideration the patient's wishes, goals, attitudes, beliefs, and circumstances.	D1.S7	We cover this when we talk about 'treatments' and 'management', and we emphasize shared decision making by taking into consideration the patient's wishes, goals, attitudes, beliefs, and circumstances.	
A.1 A.2	Demonstrate advanced use of interpersonal and communication skills in the effective application of practical skills for assessment, diagnosis, and management of individuals with MSK conditions.	D8.S10	We cover this in case scenarios at the end of each unit, and ask the students to role play to demonstrate communication skills etc	
A.1	Demonstrate advanced self-awareness to mitigate against the impact of a clinician's own values, beliefs, prejudices, assumptions, and stereotypes when interacting with others.	D7.S3 D7.A4	This could be discussion lead during/after clinical examination lecture. What do you do to ensure your own values, beliefs etc are not reflected in your patients' decisions? And/or could be added to reflective essay.	

A.1	Demonstrate effective advanced communication skills when applying behavioural principles e.g. modifying conversations based on an individual's levels of activation and health literacy, providing appropriate and accessible information and support to ensure understanding of the MSK condition's current and potential future impact on their lives.	D4.S2	We cover this in role play the clinical scenarios, and when we have time within the timetable, we discuss how the students modify their consultation	
A.1	Demonstrate advanced use of interpersonal and communication skills during the history taking, physical examination, reassessment, and management of individuals, including all documentation e.g. consideration of verbal and non-verbal communication, adapting to individual preferences, cognitive and sensory impairment, and language needs. Avoids jargon and negative assumptions.	D5.S9	This is covered in inter-unit case reports.	
A.1	Demonstrate efficient and effective use of advanced active listening skills throughout the individual's encounter e.g. both are involved in an active, two-way process.	D7.S2	This is covered in case reports, and role play of clinical scenarios	
A.1	Demonstrate effective documentation of informed consent from the individual for assessment and management procedures as appropriate.	D7.S6	This is discussed during clinical examination, management options, and case reports.	

A.1	Demonstrate maintenance of clear, accurate, and effective records of assessment and management to meet clinical and legal requirements.	D7.S7	Good clinical record keeping, patients' confidentiality and data protection is discussed during the course and case reports.	
A.2	Demonstrate effective and efficient communication and shared decision making with all individuals involved in determining and managing goals, clinical interventions, social prescribing, and measurable outcomes to ensure integrated patient care e.g. verbal, written, and digital communication to serve the individual's best interest.	D6.S5 D7.S4 D10.S3	This is demonstrated in their reflective essay, and they provide evidence such as copies of letters to GPs and other multi- professions in MSK.	
A.2	Demonstrate an advanced level of effective, direct, person-centred approach to practice, responding and rapidly adapting the assessment and intervention to the emerging information and the patient's perspective e.g. enabling individuals to make and prioritise decisions about their care, exploring risks, benefits, and consequences of options on their MSK condition and life, such as paid/unpaid work, including doing nothing.	D10.S2 D10.S10	This is covered in the discussions during the course, and further evidenced in case reports and reflective essay.	

A.2	Demonstrate advanced use of clinical reasoning to integrate scientific evidence, clinical information, the individual's perceptions and goals, and factors related to the clinical context and the individual's circumstances e.g. using clinical outcome measures such as pain, function, and quality of life to progress meaningful goals, and offering regular appointments to monitor other healthcare needs associated with MSK long-term conditions and co-morbidities.	D6.S3	Case reports and reflective essay include literature to reference patients' management programmes, as well as goals and healthcare needs associated with MSK long-term conditions and co-morbidities.	
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Domain B: Assessment, investigation and diagnosis

DOMAIN B: ASSESSMENT, INVESTIGATION AND DIAGNOSIS Capability 3. History-taking Capability 4. Physical assessment Capability 5. Investigations and diagnosis				
Cross referenced MSK CCF	Essential knowledge: General knowledge underpinning capabilities 3, 4 & 5	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the theoretical basis of the assessment of the MSK system and interpretation of this assessment towards a clinical diagnosis.	D5.K2	This is covered, this is the basis of the foundation module.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate critical understanding of the process of complex hypothetico-deductive clinical reasoning, including complex hypothesis generation and testing.	D6.K1	This is covered by core lecture and practical component of the module, also covered in case scenarios, case reports and practical examination .	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate an advanced level of effective use of the process of complex pattern recognition, including the importance of organising advanced clinical knowledge in patterns.	D6.K2	This is covered through all 3 units with clinical examination lecture and then each individual joint.	<input checked="" type="checkbox"/>

B.3 B.4 B.5	Demonstrate advanced application of the various categories of hypotheses used in MSK healthcare, including those related to diagnosis, treatment, and prognosis. For example, understand where early referral and diagnosis may affect long-term outcome, such as ruptured Achilles tendon, internal derangement of the knee, and cauda equina.	D6.K3	This is covered by the small group discussion when considering differential diagnosis and management options.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate advanced evaluation of common clinical reasoning errors.	D6.K5	This is covered in the discussions we have about MSK masqueraders and contraindications. Also with discussions such as what other pathologies can present clinically like a frozen shoulder.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate integration of advanced knowledge and clinical reasoning in the evaluation of complex clinical information obtained e.g. infectious causes or metabolic causes manifesting as joint pain and muscle pain.	D8.K4	This is covered through all 3 units with clinical examination lecture and then each individual joint.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the relevant clinical sciences as applied to MSK conditions, such as clinical anatomy, physiology, pain science, biomechanics, and epidemiology in assessment and management.	D3.K1	This is covered in taught lecture and discussion of each individual joint.	<input checked="" type="checkbox"/>

B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the interrelationship of anatomical structures in MSK function and dysfunction.	D5.K1	This is covered in all anatomy lectures.	
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of pathology and pathogenesis of mechanical dysfunction of the MSK, neurological, and vascular systems presenting to MSK first contact practitioners.	D2.K4	This is covered the MSK, and to some extent neurological (cervical myelopathy etc) but we need to include more on vascular. This could be a new lecture and expand on differential diagnosis in this area.	
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of assessment, diagnosis, and management of nonmechanical dysfunction of the MSK system, MSK masquerades, and complex multi-system pathology e.g. local and national guidelines, pathways, and policies for tumours and metastatic disease, fractures, autoimmune/ inflammatory diseases, infections, endocrinology, haematology, and other associated red flags.	D2.K5	This is covered in clinical examination lecture, history taking of each joint, and again in contraindications of treatment.	
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of neurological, internal visceral, cardio-vascular, dental, and orthodontic dysfunctions linked with the MSK system.	D2.K6 D2.K7 D2.K8 D2.K9	The module covers neurological, internal visceral and cardio-vascular dysfunction linked with MSK conditions, via taught lecture and clinical examination. Dental/orthodontic not covered fully but we include it in differential diagnosis for facial pain/headaches, and prompted students on what further questions might be asked their patients. E.g. teeth grinding, pain when chewing etc	

B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of pain sciences related to the MSK system.	D2.K10	An update on referred symptoms lecture is required. E.g. new definition of pain, better understanding/ evidence of different type of pain, and how that linked to MSK system.	
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of examination procedures to enable differential diagnosis of the MSK, neurological, vascular, and lymphatic dysfunction, while additionally exploring co-morbidities, mental health, and social health impacts as seen within the MSK FCP role.	D2.K11	We currently cover MSK and neurological, but we can include vascular and lymphatics, in differential diagnosis or clinical examination	
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the specific diagnostic and evaluative qualities of assessment tools likely to be used within the MSK FCP role, including: reliability, validity, responsiveness, positive likelihood, negative likelihood, and diagnostic accuracy.	D3.K3	<p>We consider and discuss the use of assessment tools/ special tests and relevant outcomes measures in clinical examination lecture with examples, such as the use of MSK-HQ, Startback and oxford shoulder score.</p> <p>This area can be expanded, formalised and improved by updating with the latest edition of special test book, and create a chart of common outcome measures in different body parts. Content includes reliability, validity, responsiveness, positive likelihood, negative likelihood, and diagnostic accuracy.</p>	

B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of static, dynamic, and functional posture in the assessment of the MSK system and interpretation of this assessment.	D5.K3	This is covered when we go through the clinical examination of each joint both subjectively and objectively.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the biomechanics and principles of active and passive movements of the articular system, including the joint surfaces, ligaments, joint capsules, and associated bursae in the assessment of the MSK system and interpretation of this assessment.	D5.K4	This is covered through the whole module	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the specific tests for functional status of the muscular, nervous, and vascular system in the assessment of the MSK system and interpretation of this assessment.	D5.K5 D5.K6 D5.K7	This is covered when we teach to ask appropriate questions in the history to help differential diagnostic for vascular, muscular and nervous system. Also appropriate clinical examination. E.g. look at colour and check pulses for possible vascular cause; observe muscle wastage for possible neurological and muscular cause.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the specific special/screening tests for the assessment of the MSK system and interpretation of this assessment.	D5.K8	We already made reference to special tests, screenings that can be used as appropriate. Again. This can be added it so formally there.	<input checked="" type="checkbox"/>
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of appropriate medical diagnostic tests and their integration required to make a MSK clinical diagnosis e.g. able to select the appropriate investigative tests,	D5.K9	This is partially covered and discussed in clinical examination, but it needs expanding and formulise in Foundation module.	<input type="checkbox"/>

	interpret results, and inform assessment and decision making.			
B.3 B.4 B.5	Demonstrate comprehensive advanced knowledge of the specific indications and contraindications (including behavioural principles) of the use of diagnostic tools including imaging, blood test, neurophysiology etc.	D4.K3	This is discussed during the course where appropriate, but it is not covered or formalised.	
Critical skills: Generic skills underpinning capabilities 3, 4 & 5				
B.3 B.4 B.5	Demonstrate an evidence-informed approach to the advanced assessment of individuals with MSK conditions.	D1.S3	This is covered by reflective essay. We can make it clearer by referencing to guidelines. e.g NICE spondyloarthropathy, LBP, arthritis guidelines.	

B.3 B.4 B.5	Demonstrate advanced application of comprehensive knowledge of the examination and management of individuals with MSK conditions e.g. able to assess and manage commonly seen patterns and syndromes and the causes to which they relate: joint, bone pain, muscle pain and weakness, systemic extra-skeletal problems related to trauma, degenerative, neoplastic, developmental/congenital, and psychological causes etc.	D5.S1	This is covered throughout all 3 units.	
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B.3 B.4 B.5	Demonstrate advanced professional judgements when selecting assessment, diagnostic, and treatment techniques; evaluating benefit and risk; and adapting practice to meet the needs of different groups and individuals e.g. cognitive impairment, learning difficulties, remote consultation, chaperones, and interpreters.	D10.S6	This is covered in inter-modular case reports. We can have this as a criteria on the feedback sheet.	
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B.3 B.4 B.5	Demonstrate an advanced level of critical and evaluative collection of clinical information to ensure reliability and validity, ensuring concise and accurate documentation for clinical management, and in accordance with local protocols, legal and professional requirements.	D6.S2	This is covered by reflective essay.	
B.3 B.4 B.5	Demonstrate application of comprehensive advanced knowledge of the biomedical, clinical, and behavioural sciences in the assessment of individuals with MSK conditions e.g. presentation of pathological and psychosocial presentations affecting the structure, function, inflammation, and pain.	D2.S1 D4.S1 D3.S1	This is covered in the whole of foundation module, and soft tissue healing lecture at the beginning gives them the background.	
B.3 B.4 B.5	Demonstrate effective application of assessment and outcomes to evaluate aspects of the complex clinical behavioural principles in the management of individuals e.g. fear of movement.	D4.S1 D4.S4	This is covered by case reports, reflective essays, group discussion on interesting patients when students are asked to bring a case to discuss at each unit. We also discussed biopsychosocial assessment of pain. This can be formularised by adding ABCEDFW assessment in core lecture of pain.	

B.3	Demonstrate advanced level of efficient and effective questioning strategies to obtain reliable and valid information from history taking, while demonstrating the ability to explore and appraise an individual's perceptions, ideas, and beliefs about their symptoms e.g. appropriate and sensitive communication styles, exploring, synthesising, and distilling relevant information about relationships between social activities, work, and health (biological and psycho-social barriers to recovery, frailty, dementia, other determinants of health).	D7.S1	This could be covered in case reports and reflective essay.	<input checked="" type="checkbox"/>
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B.3	Demonstrate an advanced level of accurate and efficient selection of inquiry strategies, based on early recognition and correct interpretation of relevant complex clinical cues e.g. gather, synthesise, and appraise from various sources, sometimes incomplete or ambiguous information relating to current and past history, their activities, any injuries, falls, frailty, multimorbidity, or other determinants of health and wellbeing and characteristics of MSK conditions (pain, stiffness, deformity, weakness, sensory loss, and impact on tasks and occupation etc.).	D6.S1	This is covered in the reflective essay and in clinical examination lecture, and individual joint examination.	
B.3	Demonstrate the advanced ability to simultaneously monitor multiple complex dimensions of information while maintaining a professional but relaxed communication style throughout contact with the individual e.g. MSK symptoms have the potential to be features of non-MSK serious pathology, compounded by psychological and mental health factors and affected by lifestyle factors (including smoking, alcohol, and drug misuse).	D10.S7	This is covered and discussed in clinical examination. However we could develop more-what would you do/say to the patient if you were worried that the patient sitting in front of you was seriously ill with a non MSK related disorder. We can facilitate more discussion in this area.	

B.4	Demonstrate the ability to efficiently and effectively gain an individual's consent, respecting and maintaining privacy and dignity, complying with infection and control procedures.	D7.S3 D7.S6	We covered in clinical examination	<input checked="" type="checkbox"/>
B.4	Demonstrate advanced prioritisation in the physical assessment and management of individuals with complex MSK conditions, adapting to the needs of individuals and potential limitations of the clinical environment e.g. cognitive impairment, chaperone, remote consultations, and local policy (social distancing, PPE).	D6.S6	We covered in case reports, reflective essays and role play during the course.	<input checked="" type="checkbox"/>
B.4	Demonstrate advanced level of sensitivity and specificity in the physical and functional assessment of the articular, muscular, fascial, nervous, vascular, and cardiorespiratory systems.	D8.S1 D8.S2 D8.S3 D8.S4 D8.S5	This is covered throughout the module	<input checked="" type="checkbox"/>
B.4	Demonstrate accurate physical diagnosis of MSK dysfunctions e.g. identify, analyse and interpret significant information from the assessment, including any ambiguities.	D5.S2	This is covered throughout the module	<input checked="" type="checkbox"/>

Domain C: Condition management, interventions and prevention

DOMAIN C: CONDITION MANAGEMENT, INTERVENTIONS AND PREVENTION				
Capability 6. Prevention and lifestyle intervention Capability 7. Self-management and behaviour change Capability 8. Pharmacotherapy Capability 9. Injection therapy Capability 10. Surgical interventions Capability 11. Rehabilitative interventions Capability 12. Interventions and care management Capability 13. Referrals and collaborative work				
Cross referenced MSK CCF	Essential knowledge: Generic knowledge underpinning capabilities 6, 7, 12 & 13	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/not covered
C.6 C.7 C.12 C.13	Demonstrate comprehensive advanced knowledge of prognostic, risk, and predictive factors of relevant health problems in relation to MSK management strategies e.g. adequate vitamin D for bone health, and the effects of smoking, obesity, mental health, frailty, inactivity etc.	D3.K4	This is partially discussed during clinical examination. We need to expand this area in clinical exam lecture (subjective exam)- to discuss the impact of lifestyle factors in each joint and in a more generic manner. Suggestion: A slide or two to detail the impact and evidence of these factors on MSK condition. E.g. Alcohol and smoking increase risk of AVN; obesity can increase tendinopathy Management: signpost to smoking cessation, weight management	

<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate comprehensive knowledge of the relevant theories of behaviour health change e.g. the transtheoretical model and patient activation (behavioural reactions to pain and limitations, coping strategies, personal goal setting etc) related to MSK assessment and management.</p>	<p>D3.K4</p>	<p>We partially discussed during pain lecture and students' discussion on chronic pain.</p> <p>We can formalise biopsychosocial assessment on 'pain' lecture and workbook manual, and discuss cognitive behavioural therapy approach</p>	<p><input checked="" type="checkbox"/></p>
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate comprehensive knowledge of the role of the biopsychosocial model, e.g. risk factors for the persistence of MSK conditions and the role of MDT management strategies.</p>	<p>D3.K4</p>	<p>We partially discussed during pain lecture and students' discussion on chronic pain.</p> <p>We can formalise biopsychosocial assessment ABCDEFW- add on pain lecture, and add these bullets points of persistent pain on workbook manual.</p> <p>Add: Group discussion on the role of MDT (linked to spinal- clinical model 4- expand on here)</p>	<p><input checked="" type="checkbox"/></p>
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate comprehensive advanced knowledge of all possible interventions for management of MSK conditions e.g. where agreed in partnership and acting in the individual's best interest, refer and/or signposting for relevant investigations, local and national services, including self-help, counselling, and coaching support.</p>	<p>D5.K10 D6.K4</p>	<p>This is currently discussed at the end of lecture of clinical examination. However, to make it clearer, at the end of subjective and objective examination. We could add a slide to aid clinical reasoning and appropriate onward management. Tick box:.</p> <p><input type="checkbox"/> Is it mechanical Vs non-mechanical pathology (e.g. red flags)?</p>	<p><input checked="" type="checkbox"/></p>

			<ul style="list-style-type: none"><input type="checkbox"/> Are diagnostic investigations (radiology, blood test) required?<input type="checkbox"/> Are there any psychosocial factors may contribute symptoms?<input type="checkbox"/> What is the agreed patients' goal & expectation?	
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<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate comprehensive advanced knowledge including indications and contraindications of all available multimodal therapeutic interventions for management of MSK conditions e.g. the safety and appropriateness of referral for rehabilitation and/or specific interventions (manual techniques, electrotherapy, social prescribing, injection therapy, and pharmacotherapy etc.).</p>	<p>D5.K11 D5.K14 D5.K15 D8.K1 D8.K2</p>	<p>We covered injection therapy and manual therapy fully.</p> <p>We need to add pharmacotherapy lecture after injection therapy - consider indication, contraindication and patients' advice on common MSK medication.</p> <p>We need to add a small social prescribing lecture.</p> <p>At the end of treatment techniques- facilitate group discussion on what other intervention that may employ e.g. electrotherapy.</p>	<p></p>
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate comprehensive advanced knowledge of ergonomic strategies and advice to assist the individual/ relevant agencies on effective risk assessments and provision of appropriate working conditions. This may include adaptation to meet the individual's needs in their work environment to prevent MSK-related work loss e.g. appropriate use of FIT note.</p>	<p>D5.K17</p>	<p>We covered this briefly during subjective examination. We can add depth and formalise this in the clinical examination lecture and subjective examination of relevant joints.</p>	<p></p>

			E.g. consider ergonomic assessment, optimal posture advice, e-copy information leaflet (co-kinetics); appropriate use of FIT note.	
C.6 C.7 C.12 C.13	Demonstrate comprehensive advanced knowledge of preventative programmes for MSK-associated health conditions e.g. knowledge of and referral pathways for all local ex groups, smoking cessation, and weight management programmes.	D5.K18	We discussed this during the course. We can formulise this in lecture/ students' activities. We can add a discussion on this topic- e.g. what are people currently doing at work?	
Critical skills: Generic skills underpinning capabilities 6,7,12 & 13				
C.6 C.7 C.12 C.13	Demonstrate an advanced level in the ability to retrieve, integrate, and apply evidence-based knowledge from the clinical, medical, and behavioural sciences in the clinical setting; recognising the limitations of incorporating evidence when managing individuals with MSK conditions e.g. social, economic, and environmental factors on an individual's behaviour, intervention, and management plan.	D1.S1 D1.S3 D1.S6 D10.S1	We covered this in case study and reflective essay	

<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate an advanced ability to integrate and apply evidence-informed approaches in the presentation of health promotion and preventative care programmes e.g. work in partnership utilising behaviour change principles to promote and support the individual with continuing work/exercise participation and the importance of social networks, and clinical and non-clinical groups and services.</p>	<p>D1.S6</p>	<p>This is covered in case study and reflective essay where appropriate.</p> <p>We can add group discussion on e.g. signposting local back exercise class, hydrotherapy, Pilates, Yoga, and encourage patients to stay active. E.g. patients with OA knee/hip, and LBP, and persistent pain.</p> <p>Add under management of hip, knee and spinal in manual- to discuss group exercise therapy.</p>	<p></p>
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<p>A.1 C.6 C.7 C.12 C.13</p>	<p>Demonstrate advanced effective interpersonal and communication skills in the application of knowledge of complex biomedical sciences in the management of MSK conditions to facilitate communication and behaviour change that enables: self-management, independence, risk assessment, and health and wellbeing promotion for individuals, carers, communities, and populations.</p>	<p>D2.S3</p>	<p>We discussed communication skills informally.</p> <p>We can add motivational interviewing and DISC communication model- How do you communicate with DISC personality type? How we make enhance patient's engagement and build a relationship with your patient by understanding different communication/ personality type.</p>	<p></p>
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate an advanced ability to identify the nature and extent of an individual's functional abilities, pain, and complex multidimensional needs in relation to their management plan e.g. advising individuals, carers, and relevant agencies on living with frailty and how to adapt the environment to reduce the risk of falls, manage pain, and maintain independence etc.</p>	<p>D3.S1</p>	<p>This is covered in students' activities, case reports and reflective essay.</p> <p>We encouraged use of relevant outcome measures; and patients' goal setting.</p>	<p></p>
<p>C.6 C.7 C12 C.13</p>	<p>Demonstrate advanced effective interpersonal skills to inform the individual about their clinical presentation and all their management options e.g. supports the individual to engage in identifying the risks, prognosis, potential side effects, and likely benefits of interventions related to their personal needs and health goals.</p>	<p>D3.S4 D7.S3</p>	<p>We discussed this when we considered management options.</p> <p>We can assess this on practical exam questions- e.g. to incorporate discussion on risks Vs benefits of management options</p>	<p></p>

			<p>of OA knee/hip/ LBP, rehab ideas, patients' factors.</p> <p>We also add this as extra marking criteria on case study report.</p>	
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate advanced effective application of aspects of behavioural principles in the management of individuals to optimise their physical activity, mobility, fulfilment of personal goals and independence relevant to their MSK condition e.g. supports and recognises when to discharge the individual with self-management.</p>	D4.S1	<p>We discussed this when we considered management options and management plan.</p> <p>Again, we can assess this on practical exam question.</p>	
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate effective implementation of the biopsychosocial model e.g. able to identify risk factors for the persistence of MSK conditions and advise, signpost, and refer individuals to psychological therapies, counselling, and pain services as appropriate.</p>	D4.S3	<p>This could be covered on new materials on pain lecture- add Biopsychosocial assessment ABCDEFW & its management.</p>	
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate an advanced level of skill in implementing and educating individuals in appropriate rehabilitation exercise programmes, supporting individuals to engage and explore personal goals, the consequences of their actions and inactions on these goals, and their health status and independence relevant to their MSK condition.</p>	D7.S5	<p>This is covered when discussing management options and management plan.</p>	

<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrate efficient and effective management of patients with multiple complex inter-related or separate problems and/or co-morbidities e.g. communicate and collaborate with inter-professionals, educating and advising on management interventions and plans for individuals who are off work with back and knee pain but restricted to exercise due to COPD and concerned about a loss of employment.</p>	<p>D6.S5 D10.S11</p>	<p>We discussed this during clinical examination, and individual joint where appropriate.</p> <p>We can formalise and add depth by adding a new slide on clinical examination PMHx and the most common and relevant medical conditions on MSK health or masqueraders of MSK. e.g. Hx of cancer, DM, hypertension, high cholesterol, DM, heart failure, COPD, IBS, osteoporosis.</p>	<p></p>
<p>C.6 C.7 C.12 C.13</p>	<p>Demonstrates effective MDT working to optimise service delivery of the management of MSK conditions and health, prevention, and wellbeing for the benefit of individuals, carers, professionals, and agencies e.g. evidence of shared learning, development, audit, referral pathways.</p>	<p>D10.S12</p>	<p>We covered multi-professional working in case report and reflective essay.</p> <p>We can tweak marking criteria/ learning outcome in case study report, and foundation Module HB- p27 Feedback form to make this more specific.</p>	<p></p>

DOMAIN C: CONDITION MANAGEMENT, INTERVENTIONS AND PREVENTION				
Capability 8. Pharmacotherapy				
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capability 8	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered
C.8	Demonstrate comprehensive knowledge of indications, contraindications, effects, and side-effects of therapeutic drugs, understanding local and national formularies, resources, guidelines, and policies related to their use in the examination and management of MSK conditions e.g. analgesics, non-steroidal and anti-inflammatory drugs, corticosteroid, and drugs used in treating individuals with metabolic bone disease, gout, inflammatory arthritis, and in the management of persistent pain.	D2.K12	We need to put a lecture of pharmacotherapy on common pain medication relevant to MSK practice. This also require a written section in the clinical reasoning manual.	<input checked="" type="checkbox"/>
Critical skills: Generic skills underpinning capabilities 6,7,12 & 13				
C.8 C.12	Advise patients on the most common medications used in MSK and pain disorders to advise individuals for medicines management of their MSK problem, including the expected benefit, limitations, advantages, and disadvantages of pharmacotherapy and the importance of an impartial approach to the information shared in the context of other management options e.g. address and allay individuals' fears, beliefs, and concerns.	AP MSK bolt-on D2.S1	We can cover these points in the pharmacotherapy lecture and in the manual.	<input checked="" type="checkbox"/>

C.8	Keep individuals' responses to medication under review, recognising differences in the balance of risks and benefits that may occur in the context of polypharmacy, multi-morbidity, frailty, and cognitive impairment. Seeking appropriate support or onward referral for pharmacotherapy where required, and utilising available resources to further complement advice given e.g. signpost to websites, leaflets, pharmacists, MHRA yellow card scheme.	AP MSK bolt-on D2.S2	We can cover these points in the pharmacotherapy lecture and in the manual. Prescribing Vs de-prescribing	
DOMAIN C: CONDITION MANAGEMENT, INTERVENTIONS AND PREVENTION CAPABILITY 9. INJECTION THERAPY				
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capability 9	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered
C.9	Understand the role of joint injections, informed by the evidence base in MSK practice, local and national guidelines, pathways and policy.	AP MSK bolt-on	This is covered in injection lecture, and when discussing injection therapy of individual joints/ lesions.	
Critical skills: Generic skills underpinning capabilities 6,7,12 & 13				

C.9	Work in partnership to explore the suitability for injection therapy, including the expected benefit, limitations, advantages, and disadvantages of injection therapy and the importance of an impartial approach to the information shared in the context of other management options. Seeking advice and local referral for injection where required.	AP MSK bolt-on	This is covered in Injection Therapy lecture and manual.	
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DOMAIN C: CONDITION MANAGEMENT, INTERVENTIONS AND PREVENTION				
CAPABILITY 10. SURGICAL INTERVENTIONS				
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capability 10	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered
C.10	Demonstrate comprehensive advanced knowledge of indications for and the nature of surgical intervention in the management of MSK conditions, including the expected benefits, limitations, advantages, and disadvantages of surgical interventions and the importance of an impartial approach to the information shared in the context of other management options e.g. rehabilitative interventions and social prescribing.	D2.K13	We briefly discussed surgical intervention in some lesions. We can add a small new lecture on surgery (core knowledge; generic)- indication, patients' factors on surgery (co-morbidities, physical demand, age), patients' expectation; shared-decision	

			For those joints when common surgeries are appropriate- discuss more in depth. E.g. Barbotage technique, SAD, TKR, knee arthroscopy, THR	
Critical skills: Specific skills underpinning capability 10				
C.10	Work in partnership with individuals to explore suitability of surgical intervention e.g. to allay individuals' fears, beliefs, and concerns, seeking assistance where required, referring appropriately and with consideration of local and national pathways, guidelines, resources, and policies.	AP MSK bolt-on	This will be covered in a small new lecture on surgical intervention- consider patients' expectation; shared-decision	<input checked="" type="checkbox"/>
C.10	Make recommendations to employers regarding individuals' fitness to work, including through the appropriate use of fit notes and seeking of appropriate occupational health advice.	AP MSK bolt-on	This is discussed. But it can be formalised and add on clinical examination lecture- subjective examination, and few bullets point on work/ employment status	<input checked="" type="checkbox"/>
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capability 11- Rehabilitative intervention	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered

C.11	<p>Demonstrate comprehensive knowledge and understanding of rehabilitative interventions for MSK conditions commonly seen within the FCP role, including the expected benefit, limitations, advantages, and disadvantages of surgical interventions, and the importance of an impartial approach to the information shared in the context of other management options, for example surgery.</p>	D5.K12	<p>We discussed rehabilitative intervention and exercise rehab. E.g. graded mobility exercise; capsular stretches, tendon- progressive loading.</p> <p>Suggestion for new manual: For every lesion when it is appropriate, MC to facilitate discussion on rehab and exercise ideas, and allocate time to discuss in small group- e.g. 1. what is their favourite exercise/ rehab ideas? 2. To discuss risks Vs benefits of surgical and non-surgical option on common MSK conditions.</p> <p>(We can formularise this in the manual and student activities).</p>	
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C.11	Demonstrate comprehensive knowledge of various manual exercise therapy approaches, including the expected benefits, limitations, advantages, and disadvantages, and of other therapeutic adjuncts e.g. taping, acupuncture, and electrotherapy modalities including those in physiotherapy, medicine, osteopathy, and podiatry etc used in the rehabilitative management of MSK conditions.	D5.K13 D8.K6	This is covered during discussion on the course, and case study report.	<input checked="" type="checkbox"/>
C.11	Demonstrate comprehensive knowledge of the role of digital technology to support adherence to rehabilitation interventions for individuals with MSK conditions e.g. apps and wearables.	D7.K1 D8.K4 D8.K5	This is covered during discussion on the course.	<input checked="" type="checkbox"/>
C.11	Demonstrate comprehensive knowledge of evidence informed outcome measures appropriate to the management of MSK conditions.	D5.K16	This is covered when discussing treatment and management. We recommend use of MSK-HQ in case report (SOMM is doing an audit on treatment techniques). We can formalise this point by recommending 2-3 relevant outcome measure of each joint, and facilitate open discussion.	<input type="checkbox"/>

Critical skills: Specific skills underpinning capability 11				
C.11	Work in partnership with individuals to explore suitability of rehabilitation intervention (referrals to physiotherapy, occupational therapy, exercise instructors, and self-management resources etc.), seeking assistance where required, referring appropriately and with consideration of local and national pathways, guidelines, resources, and policies.	D6.S5	This is discussed after clinical examination. However, this can be formalised by introducing few slides on shared decision making after clinical examination lecture.	<input checked="" type="checkbox"/>
C.11	Demonstrate integration of principles of patient education as a component of multi-modal therapy intervention for the management of MSK conditions.	D5.S7	This is covered in case report and reflective essay.	<input checked="" type="checkbox"/>
C.11	Demonstrate integration of principles of exercise physiology as it applies to therapeutic rehabilitation exercise programmes, as a component of multi-modal intervention for management of MSK conditions e.g. an exercise programme with podiatry referral.	D5.S5	This is covered after treatment of each part. However, this can be improved by a small lecture on exercise and rehab-physiology of exercise; benefits to MSK health and psychological health.	<input checked="" type="checkbox"/>
C.11	Demonstrate sensitivity and specificity of handling in the implementation and instruction of individuals in appropriate therapeutic rehabilitation exercise programmes e.g. graded return to normal activity, modifying activity advice and programmes.	D8.S9	This is covered in case report, and within the rehabilitation session.	<input checked="" type="checkbox"/>

Domain D: Service and professional development

DOMAIN D: SERVICE AND PROFESSIONAL DEVELOPMENT				
Capability 14. Evidence-based practice and service development				
Cross referenced MSK CCF	Essential knowledge: Specific knowledge underpinning capability 14	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/not covered
D.14	Demonstrate advanced critical evaluative application of evidence-informed practices e.g. uses clinical audit to evidence the use of best practice/national guidelines within MSK care and service delivery, identifying where modifications are required.	D1.K1	This is covered in reflective essay point 4.	<input checked="" type="checkbox"/>
D.14	Demonstrate evaluative understanding of appropriate outcome measures e.g. data collection and analysis, satisfaction feedback, and stakeholder engagement to improve quality of care, service delivery, and health inequalities.	D1.K2	This is covered in case study and reflective essay. We can tweak the learning outcomes and marking criteria to make these capabilities more obvious.	<input checked="" type="checkbox"/>
D.14	Demonstrate effective integration of comprehensive knowledge, and cognitive and metacognitive proficiency e.g. understands the importance of reflective practice and supervision on professional and service development.	D10.K1	This is covered in reflective essay.	<input checked="" type="checkbox"/>

D.14	Evaluate the existing and changing professional, social, and political influences on the breadth and scope of advanced MSK practice within the context of delivery of services in order to continuously improve MSK healthcare.	ACP MSK bolt-on	This is discussed during the course, where relevant.	<input checked="" type="checkbox"/>
D.14	Evaluate the extent to which advanced MSK practice contributes to strategies related to collaborative interprofessional working and person-centred care.	ACP MSK bolt-on	This is covered throughout the course, and in case report and reflective essay.	<input checked="" type="checkbox"/>
Critical skills: Specific skills underpinning capability 10				
D.14	Demonstrate ability to critically review the recent literature of the basic and applied sciences relevant to MSK conditions, to draw inferences for practice and present material logically in verbal and written forms.	D1.S2	This is covered in case study and reflective essay.	<input checked="" type="checkbox"/>
D.14	Demonstrate the advanced use of outcome measures to evaluate the effectiveness of clinical interventions and services, and uses outcomes to inform future planning and development.	D1.S5	We discussed relevant outcome measures, and advised to use MSK-HQ for inter-modular case reports. To increase depth in this area, we will be covered condition-specific outcome measures, and patients' satisfaction.	<input checked="" type="checkbox"/>

D.14	Demonstrate effective critical appraisal of research relevant to MSK practice.	D9.S1	This is covered in reflective essay point 5.	<input checked="" type="checkbox"/>
D.14	Demonstrate ability to consult skilfully with peers, other professionals, and legislative and regulatory organisations as appropriate.	D10.S12	This is covered in reflective essay.	<input checked="" type="checkbox"/>
D.14	Critically analyse leadership practice through self awareness of ability to lead, influence, and negotiate with others.	AP MSK bolt-on	N/A (AP)	
D.14	Critically apply changes to their behaviour relating to underpinning theory on leadership, and analyse and reflect on these changes.	AP MSK bolt-on	N/A (AP)	

Personal attributes

MSK FCP CORE COMPETENCY: ATTRIBUTES OF AN MSK FCP CLINICIAN				
Cross referenced MSK CCF	Essential personal attributes: Generic attributes underpinning all 14 capabilities	Cross referenced IFOMPT	Cross referenced SOMM	Fully/partially/ not covered
A.1-2 B.3-4 C.6-13	Demonstrate a critical and evaluative approach to all aspects of advanced practice	D1.A1	This is covered throughout the course, case reports and reflective essay.	<input checked="" type="checkbox"/>
A.1-2 B.3-4 C.6-13	Demonstrate adaptability of comprehensive knowledge of biomedical sciences in the context of person-centred practice.	D2.A1	This is covered in treatment technique and management lecture, also emphasized as we considered management of each lesion.	<input checked="" type="checkbox"/>
A.1-2 B.3-4 C.6-13 D.14	Demonstrate criticality, creativity, and innovation of practice in the application of knowledge of biomedical sciences in the examination and management of individuals with MSK conditions.	D2.A2 D2.A3	This is covered during student's small group discussion, also case report and reflective essay.	<input checked="" type="checkbox"/>
A.1-2 B.3-4 C.6-13 D.14	Demonstrate an objective and analytical attitude in the application of complex knowledge of the clinical sciences.	D3.A1	This is covered throughout the course.	<input checked="" type="checkbox"/>

A.1	Demonstrate an advanced level of sensitivity to changes in an individual's behaviour.	D4.A1	This is covered when we discussed management options and patients' centred approach.	<input checked="" type="checkbox"/>
A.1	Demonstrate critical awareness of the central role of communication skills in the development of advanced clinical expertise.	D7.A2	This is discussed during the course, also covered in case report and reflective essay. This area will be enhanced by new content on communication skills, consultation skills and shared decision making.	<input checked="" type="checkbox"/>
A.1	Demonstrate empathy in the application of advanced communication skills.	D7.A4	This is reinforced throughout the course.	<input checked="" type="checkbox"/>
A.1 A.2	Demonstrate critical awareness of person-centred communication as being central to effective advanced clinical practice.	D7.A1	This is reinforced throughout the course.	<input checked="" type="checkbox"/>
A.2	Demonstrate a critical understanding of the key role of person-centred complex clinical reasoning skills in all aspects of advanced clinical practice.	D6.A1 D6.A2	This is discussed during the course, also covered in case report and reflective essay. This area will be enhanced by new content on communication skills, consultation skills and shared decision making.	<input checked="" type="checkbox"/>

C.6 C.7	Demonstrate critical awareness of public health strategies and guidelines on the promotion of wellness and prevention through the education of individuals, the public, and health and social care professionals.	D7.A3	This is discussed during the course, where relevant (e.g. OA knee; persistent mechanical LBP). This area will be improved by adding new content such as health promotion, social prescribing and multi-professional working.	<input checked="" type="checkbox"/>
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C.6-13	Demonstrate an advanced level in the application of complex biopsychosocial principles.	D4.A3	This is discussed in pain lecture. This could be covered more fully on new materials on pain lecture-add Biopsychosocial assessment ABCDEFW & its management.	<input checked="" type="checkbox"/>
C.11	Demonstrate adaptability of knowledge of MSK management and rehabilitation in the context of person centred practice.	D5.A1	This is covered when discussing management options, also case report and reflective essay.	<input checked="" type="checkbox"/>
C.6-13	Demonstrate criticality of evidence-informed practice in the application of knowledge of MSK management and rehabilitation, in the context of person-centred care.	D5.A2	This is covered when discussing management options, also case report and reflective essay.	<input checked="" type="checkbox"/>

A.1 B.5	Demonstrate an advanced level of effective collaborative and advanced communication skills in requesting further investigation or referral to another health or social care professional.	D6.A3	This is covered in clinical examination and management, also in case reports and reflective essay.	<input checked="" type="checkbox"/>
A.2 B.3-5 C.6-13	Demonstrate criticality, creativity, adaptability, and innovation of practice in the application of practical skills in the context of person-centred practice.	D8.A1 D8.A2 D8.A3	This is reinforced throughout the course	<input checked="" type="checkbox"/>
A.1-2 B.3-4 C.6-13 D.14	Demonstrate an advanced level of learning through critical reflection during and after the clinical encounter.	D6.A4	This is guided and reinforced throughout the course	<input checked="" type="checkbox"/>
A.1-2 B.3-4 C.6-13 D.14	Demonstrate an advanced level of reflection and self-evaluation in managing individuals.	D4.A2	This is guided and reinforced throughout the course. We covered reflective practice, and be a reflective practitioner at level 7.	<input checked="" type="checkbox"/>
B.3-5 C.6-13	Demonstrate an advanced level of learning through precise and timely reassessment.	D6.A5	This is covered throughout the course.	<input checked="" type="checkbox"/>
D.14	Demonstrate professional, ethical, and autonomous practice.	D10.A1	This is emphasised throughout the course.	<input checked="" type="checkbox"/>

D.14	Demonstrate advanced professional judgement, empathy, and cultural competence within clinical practice.	D10.A5	This is emphasised throughout the course.	<input checked="" type="checkbox"/>
D.14	Demonstrate critical awareness of the role of research in advancing the body of knowledge in MSK practice.	D9.A1 D9.A2	This is guided and emphasised throughout the course. This also covered in case reports and reflective essay- level 7.	<input checked="" type="checkbox"/>
D.14	Demonstrate a commitment to life-long learning with continuous professional development.	D10.A2	This is covered in reflective essay point 8.	<input checked="" type="checkbox"/>
D.14	Demonstrate a commitment to contributing to professional development through teaching and mentoring, and assisting in the advancement of MSK provision across health and social care to the benefit of the public.	D10.A3 D10.A4	This is covered in reflective essay point 8.	<input checked="" type="checkbox"/>

