Faculty of Sport and Exercise Medicine UK

Diploma in Musculoskeletal Medicine Syllabus

Diploma in Musculoskeletal Medicine
Syllabus

Executive summary

The Faculty of Sport and Exercise Medicine UK recognises that musculoskeletal injury (MSKI) is a significant presentation in Primary Care, yet there is no consistent teaching in Medical Schools or General Practice Registrar training.

We want to promote a more physically active nation and must ensure that MSKI is not a barrier to active participation at any level and at any age.

This Diploma will set the standard for MSK knowledge across the breadth of primary care; a benchmark against which both commissioners and patients can quality assure.

It is not a stand-alone qualification, as it is only an assessment of MSK knowledge, but the clinical application of this knowledge in an integrated MSK service will drive up the standard of MSKI care across the NHS.

Dr Alastair Nicol FFSEM(UK)
Chair, FSEM Exams Committee

Background information

Demonstrate your expertise with the Diploma in Musculoskeletal Medicine (DipMSK)

The DipMSK has been established to allow you to demonstrate knowledge of musculoskeletal medicine, especially for primary care practitioners working in community care.

The exam is an assessment of knowledge and clinical problem-solving and is very relevant to current UK practice in primary care.

The Faculty would like to build a network of motivated professionals who feel their experience and expertise can be validated by the DipMSK.

By gaining the DipMSK qualification, you will:

- **Demonstrate** your knowledge and interest in musculoskeletal medicine
- **Provide** evidence of knowledge and its application for extended roles in community MSK services or specialisation in larger GP practices
- **Complement** and support your knowledge base in an important area that has been under-valued in the past but growing fast as the country recognises the benefits of physical activity for all.

Who should take the DipMSK?

- GPs who want to improve and demonstrate their knowledge and interest in MSK medicine.
- Any Allied Healthcare Professionals (AHPs) who wish to improve and demonstrate their knowledge and interest in MSK medicine.
- GP registrars with a particular interest in MSK medicine who would like to demonstrate their knowledge as they continue their education journey.

The DipMSK syllabus

The DipMSK is an assessment of knowledge and clinical problem solving, and targets practitioners who wish to demonstrate their knowledge and understanding of community presentations of MSK medicine.

The exam requires a level of knowledge appropriate for a competent primary care practitioner (Doctor or AHP) working in the UK.

In each subject area, you will not only need to demonstrate knowledge and describe areas relating to the diagnosis and presentation, but you will also need to recognise when to image, when referral is both timely and appropriate, and to describe management options both in community and secondary healthcare.

You will need to demonstrate knowledge and its application in generating appropriate advice and management plans for the following areas in MSK medicine:

Subject 1. Frozen Shoulder

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
A typical presentation and disease course as per Nationally Recognised Guidelines (e.g. British Elbow and Shoulder Society (BESS)/British Orthopaedic Association (BOA)). Features which suggest important alternative diagnoses such as: • Osteoarthritis • Infection • Inflammatory Disease • Malignancy • Missed dislocation Potential biopsychosocial features arising in patients developing shoulder region MSK conditions.	Recognise when diagnostic imaging is appropriate and which modalities are relevant. Identify populations with increased incidence of Frozen Shoulder (e.g. diabetics) and exploit the opportunities to address the associated disease and risk factors. Apply the National guidelines (e.g. BESS/BOA) on appropriate community treatment strategies including: • Education • Analgesia • Steroid injection therapy • Physio supervised and home-based exercises Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 2. Subacromial Pain Syndrome (SAPS)

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The National guidelines (e.g. BESS/BOA) on the natural history & course of conditions that present with subacromial region pain including: • Rotator cuff tendinopathy • Acute & Chronic Tears • Rotator cuff calcification • Subacromial Bursitis Features which suggest alternative diagnoses such as: • Acromioclavicular joint (ACJ) Osteoarthritis (OA) • Cervical pathology • Frozen Shoulder • Malignancy • Infection • Inflammatory Conditions • Regional neuralgia Potential biopsychosocial features arising in patients developing shoulder region MSK conditions.	Identify pre-disposing lifestyle factors (e.g. occupation, sporting activity) contributing to pathology. Recognise when diagnostic imaging is appropriate and which modalities are relevant. Apply the National guidelines (e.g. BESS/BOA) on appropriate community treatment strategies including: • Education • Analgesia • Steroid injection therapy • Physio supervised and home-based exercises Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 3. Osteoarthritis (Acromioclavicular & Glenohumeral Joint)

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The typical clinical features and presentation. Alternative diagnoses sometimes confused with both Acromioclavicular (ACJ) and Glenohumeral (GH) Osteoarthritis (OA) e.g.: SAPS and Frozen Shoulder Potential biopsychosocial features arising in patients developing shoulder region MSK conditions.	Describe the unique biopsychosocial context that having ACJ or GH OA demonstrates for different patients. Recognise when diagnostic imaging is appropriate and which modalities are relevant. Appropriate National Institute for Health and Care Excellence (NICE) recommended community treatment strategies including the opportunities & indications for: • Patient education • Analgesia • Self-management • Physio supervised, home-based exercise programme • Steroid injection therapy Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 4. Shoulder Instability

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
A typical presentation of shoulder instability including: • Risk factors and mechanisms of injury • Common types of labral pathology Potential biopsychosocial features arising in patients developing shoulder region MSK conditions.	Describe which populations present with an increased incidence of destabilising shoulder injury. Recognise when diagnostic imaging is appropriate and which modalities are relevant. Apply the National guidelines (e.g. BESS/BOA) on appropriate community treatment strategies including: • Early mobilisation • Physio supervised, home-based exercises Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 5. Elbow Region Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The key features of common pathologies occurring around the elbow such as: • Extensor & Flexor Origin Tendinopathy • Cubital Tunnel Syndrome • Olecranon bursitis • Degenerative & Inflammatory Arthropathy The features which suggest alternative diagnoses such as: • Infection • Malignancy • Referred symptoms from cervical or shoulder region • pathology • Chronic Pain states The potential biopsychosocial features arising in patients developing an elbow region MSK condition, in particular increased levels of pain sensitisation. Other syllabus subjects address the condition specific management of: • Osteoarthritis (12) • Inflammatory Conditions (13) • Tendinopathies (15)	Identify when diagnostic imaging is appropriate and which modalities are relevant for the elbow. Identify the best practice community treatment strategies relevant to the presenting condition including: • Patient education with a focus on activity • modification & home-based rehabilitation • Drug treatments (including analgesia) • Use of regional devices to modulate forces Recognise circumstances when referral for rheumatological assessment is appropriate Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 6. Wrist & Hand Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The key features of common pathologies occurring around the wrist & hand such as: • Carpal Tunnel Syndrome • Trigger Digit/Finger • Degenerative & Inflammatory conditions • Ganglion Cyst • Dupytren's Disease • Tenosynovitis • TFCC injury The various differential diagnoses presenting with symptoms in the wrist & hand: • Infection • Malignancy • Referred pain from cervical or shoulder pathologies The populations with increased incidence of wrist & hand conditions (e.g. pregnancy, occupation, sporting activity) The potential biopsychosocial features arising in patients developing a condition around the wrist & hand. Other syllabus subjects address the condition specific management of: • Osteoarthritis (12) • Inflammatory Conditions (13)	Identify when diagnostic imaging is appropriate and which modalities are relevant for the wrist & hand. Identify and apply the best practice community treatment strategies relevant to the presenting condition including: • Patient education with a focus on activity modification & home-based rehabilitation • Drug treatments (including analgesia) • Use of splints & braces • Injection therapy Recognise circumstances when referral for rheumatological assessment is appropriate Recognise circumstances when referral for surgical assessment is timely and appropriate.

Subject 7. Low Back Pain +/- Radiculopathy

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The process of initial triage as per NICE Guidance (NG59, 2016) including: Red flag features raising suspicion of significant pathologies such as: • Critical Neurological Compromise (particularly Cauda Equina Syndrome) • Malignancy (especially metastases) • Infection (osteomyelitis & discitis) • Trauma (including low force fragility fracture) • Inflammatory disease (Spondyloarthritis) Yellow flag features highlighting impact of psychosocial factors of presentation Utility of the STarT Back Tool in stratifying the level of psychosocial involvement in the patient's presentation The clinical features of radiculopathy The unique biopsychosocial context that having low backpain with or without radiculopathy demonstrates for different patients	Identify when diagnostic imaging is appropriate, when it is not appropriate, and which modalities are most appropriate for low back pain presentations. Apply the NICE recommendations around the community management of symptoms via: • Patient education & self-management • Appropriate oral analgesic strategies • Physio supervised, home-based exercises • Pain management programmes Identify the circumstances and time frames when referral for specialist assessment is appropriate.

Subject 8. Neck Pain +/- Radiculopathy

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The initial process of risk stratification including: Red flag features raising suspicion of significant pathologies such as: • Critical Neurological Compromise • Malignancy (especially metastases) • Infection (osteomyelitis & discitis) • Trauma Yellow flag features highlighting impact of psychosocial factors of presentation The clinical features of radiculopathy The unique biopsychosocial context that having neck pain with or without radiculopathy demonstrates for different patients	Identify when diagnostic imaging is appropriate, when it is not appropriate, and which modalities are most appropriate for low back pain presentations. Apply the appropriate community management strategies including: • Patient education & self-management • Appropriate oral analgesic strategies • Physio supervised, home-based exercises • Pain management programmes Identify the circumstances and time frames when referral for specialist assessment is appropriate.

Subject 9. Hip Region Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The key features of common pathologies occurring around the hip including: • Osteoarthritis • Athletic Groin Pain & Femoral Acetabular Impingement (FAI) • Greater Trochanteric Pain Syndrome (GTPS) • Conditions causing buttock region pain (e.g. • Proximal hamstrings tendinopathy, • Sciatic nerve compression • Paediatric Hip Conditions (18) The features which suggest alternative diagnoses such as: • Lumbar Spine & SIJ pathology +/- radiculopathy • Inflammatory Conditions • Infection • Malignancy • Urogenital conditions • Colorectal conditions The potential biopsychosocial features arising in patients developing a hip region MSK condition. Other syllabus subjects address the condition specific management of: • Osteoarthritis (12) • Inflammatory Conditions (13) • Tendinopathies (15)	Identify when diagnostic imaging is appropriate and which modalities are relevant for the hip conditions Apply the scoring tools available to assess impact of symptoms on daily function. Apply the best practice community treatment strategies relevant to the presenting condition including: • Patient education with a focus on weight loss, activity modification & supervised rehabilitation programme • Referral to healthy lifestyles team • Appropriate use of analgesia • Indications for Steroid Injection Therapy Identify the circumstances and time frames when referral for surgical assessment is appropriate Identify the circumstances when referral for rheumatological assessment is appropriate

Subject 10. Knee Region Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The key features of common pathologies occurring around the knee including: • Osteoarthritis • Patello-Femoral Pain • Tendinopathy • Bursitis • Iliotibial Band (ITB) Pain Syndrome • Meniscal injury • Ligament injury • Popliteal Cyst • Paediatric Knee Conditions (see 18) The features of common conditions causing lower leg pain including: • Medial Tibial Stress Syndrome (MTSS) • Stress Fracture • Chronic Exertional Compartment Syndrome The features which suggest alternative diagnoses should be considered such as: • Rheumatoid Arthritis • Gout/Pseudo Gout • Malignancy • Referred pain from hip • Lumbar spine radicular pain The potential biopsychosocial features arising in patients developing a knee region MSK condition. Other syllabus subjects address the condition specific management of: • Osteoarthritis (12) • Inflammatory Conditions (13) • Tendinopathies (15) • Paediatric MSK Conditions (18)	Identify when diagnostic imaging is appropriate and which modalities are relevant for knee conditions Apply the scoring tools available to assess impact of symptoms on daily function. Apply the best practice community treatment strategies relevant to the presenting condition including: • Patient education with a focus on weight loss, activity modification & supervised rehabilitation programme • Appropriate use of analgesia • Steroid Injection Therapy Identify the circumstances when referral for rheumatological assessment is appropriate, when referral for surgical assessment is appropriate, and when injection therapy is indicated and contraindicated

Subject 11. Foot & Ankle Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The key features of common pathologies occurring around the foot & ankle such as: • Achilles Tendinopathy • Posterior Tibialis Tendon Dysfunction (PTTD) • Neural impingement • Plantar Fasciitis • Lateral Ankle Problems following sprain injury • Ankle OA • Mid-foot OA • 1st MTPJ OA • Metatarsalgia (including Morton's neuroma) • Paediatric Foot & Ankle conditions (18) The features which may suggest other diagnoses: • Stress/Traumatic injuries • Peripheral Neuropathy • Inflammatory conditions • Referred symptoms from lumbar or knee pathology • Regional pain syndromes The potential biopsychosocial features arising in patients developing a knee region MSK condition Other syllabus subjects address the condition specific management of: • Osteoarthritis (12) • Inflammatory Conditions (13) • Tendinopathies (15) • Paediatric MSK Conditions (18)	Identify when diagnostic imaging is appropriate and which modalities are relevant for foot & ankle conditions Apply the scoring tools available to assess impact of symptoms on daily function. Identify the populations with increased incidence of foot & ankle conditions (e.g. occupational, sporting activity etc.) Apply the best practice community treatment strategies relevant to the presenting condition including: • Patient education with a focus on weight loss, activity modification • Physio supervised & home-based rehabilitation • Consideration of modifications to footwear (+/- • orthotics) • Use of analgesia • Steroid injection therapy where appropriate Identify the circumstances when referral for rheumatological assessment is appropriate Identify the circumstances when referral for surgical assessment is appropriate

Subject 12. Osteoarthritis (all regions)

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The core symptoms as per NICE Guidance (CG177, 2014): • Age >45 • Activity related joint pain • No lasting joint stiffness beyond 30 mins Some of the key resources for assessment (e.g. Keele JIGSAW) The atypical symptoms which suggest important alternative diagnoses such as: • Inflammatory Conditions (including erosive OA) • Gout/Pseudo • Infection • Malignancy • Chronic pain states The unique biopsychosocial context that having osteoarthritis demonstrates for different patients	Identify when diagnostic imaging is appropriate and which modalities are relevant Apply the scoring tools available to assess impact of symptoms on daily function. Identify the populations with increased incidence of Osteoarthritis (e.g. occupational, sporting activity etc.) Apply the appropriate NICE recommended community treatment strategies including the opportunities & indications for: • Patient education • Patient self-management including weight loss and activity modification • Physio supervised and home-based rehabilitative exercise • Mobility aids, orthoses & assistive devices • Appropriate analgesic strategies • Steroid injection therapy Identify the circumstances when referral for rheumatological assessment is appropriate Identify the circumstances when referral for surgical assessment is appropriate

Subject 13. Inflammatory Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The core clinical features of the following conditions presenting in Primary Care: • Rheumatoid Arthritis • Erosive OA • Spondyloarthropathies • Connective Tissue disorders • Vasculitis • Paediatric Conditions (see 18) The other conditions which may present similarly to the above: • Bacterial Arthritis • Viral arthritis • Lyme disease The unique biopsychosocial context that having inflammatory joint disease demonstrates for different patients The atypical symptoms which suggest important alternative diagnoses such as: • Inflammatory Conditions (including erosive OA) • Gout/Pseudo • Infection • Malignancy • Chronic pain states The unique biopsychosocial context that having osteoarthritis demonstrates for different patients	Identify the types & role of diagnostic tests having utility in the Primary Care diagnosis of these conditions. Identify the populations with increased incidence of inflammatory conditions (e.g. psoriasis, IBD, iritis, family history) Identify the co-morbidities which are common in inflammatory arthritis such as cardiovascular disease & depression Identify when diagnostic imaging is appropriate and which modalities are relevant Apply the National Guidelines (NICE 2016/2017) with recommended community care strategies including: • Early referral as appropriate • Appropriate pharmaceutical treatment as guided by a specialist • Patient education • Patient self-management including weight loss and rehabilitative exercise • Mobility aids, orthoses & assistive devices • Knowledge of flare management • Steroid injections Identify the criteria for referral to specialist Rheumatological care and any pre-referral tests indicated

Subject 14. Primary Care Rheumatological Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The core clinical features as described by relevant NICE & British Society for Rheumatology (BSR) guidelines of the following conditions presenting in Primary Care: • Gout/Pseudo Gout • Polymyalgia Rheumatica (+/- Temporal Arteritis) • Osteoporosis (including fracture risk assessment tools) The conditions that may imitate or complicate the above including: • Rheumatoid Arthritis • Septic Arthritis • Malignancy • Chronic Pain State (e.g. fibromyalgia) • Osteomalacia The unique biopsychosocial context that having the above conditions demonstrates for different patients	Identify the types & role of diagnostic tests having utility in the Primary Care diagnosis of these conditions. Identify the populations with increased incidence of these conditions (e.g. metabolic syndrome, low activity levels) Apply the management approaches defined by NICE and the BSR, specific to each condition and appropriate to community care including: • Patient education • Relevant pharmaceutical treatments • Patient self-management including dietary changes, weight loss, physical activity & rehabilitative exercise (as appropriate to each condition) • Steroid injection (gout) Identify the criteria for referral to specialist Rheumatological care, including any pre-referral tests indicated Identify the indications for urgent referral

Subject 15. Tendon Disease (Tendinopathies)

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
An understanding of the various models of pathogenesis and types of tendon disease The commonly affected areas including: • Rotator Cuff • Wrist extensor and flexor origins at the elbow • Gluteal insertion onto the Greater Trochanter • Proximal Hamstrings tendon • Patellar tendon • Achilles tendon • Apophysitis (e.g. Severs) The systemic conditions and load capacity factors associated with different types and presentations of tendon disease.	Identify when diagnostic imaging is appropriate and which modalities are relevant. Apply the core recommendations around community-based management including: • Education & Activity Modification (e.g. reduction of compressive and tensile forces) • Analgesia • Physio supervised, community-based exercises Identify the circumstances when referral for specialist review are indicated

Subject 16. Persisting Pain States

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The common features associated with persisting pain states such as: • Fibromyalgia • Regional pain syndromes • OA • Chronic widespread pain • Complex Regional Pain Syndrome (CRPS) Hypermobility syndromes The principles of neuroplasticity and sensitisation The features that would suggest alternative diagnoses such as: • Non-MSK Pain • Structural MSK conditions • Neuropathic disorders • Inflammatory Conditions • Malignancy The unique biopsychosocial context that having a persisting pain state demonstrates for different patients	Identify when and which diagnostic tests are appropriate and are not appropriate. Apply the common management strategies for community care including: • Patient education • Patient self-management including weight loss, increased physical activity and a supported rehabilitative exercise programme • Relaxation techniques • Cognitive Behavioural Therapy (CBT) & other Psychotherapies • Appropriate pharmacological treatment • Sign posting of patients to self-management resources (e.g. the Pain Toolkit) Describe the circumstances when referral to community or a hospital-based MDT Pain Team is indicated

Subject 17. Chest Wall & Thoracic Pain

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The conditions commonly associated with chest wall & thoracic region pain such as: • Costochondritis • Fibromyalgia • OA • Chronic widespread pain • Hypermobility syndromes The features that would suggest significant diagnoses such as: • Discitis & Osteomyelitis • Vertebral insufficiency fracture • Inflammatory Conditions • Malignancy The features that would suggest non-MSK disorders such as: • Cardiac • Respiratory • Gastro-oesophageal • Thoracic vessel outlet compromise • Hepatic & Splenic • Diaphragmatic The unique biopsychosocial context that having a chest wall and thoracic region pain state demonstrates for different patients	Identify when and which diagnostic tests are appropriate and are not appropriate. Apply the common management strategies for community care (once significant and non-MSK conditions are excluded) including: • Patient education • Patient self-management including weight loss, increased physical activity and a supported rehabilitative exercise programme • Relaxation techniques • CBT & other Psychotherapies • Appropriate pharmacological treatment • Sign posting of patients to appropriate self-management resources (e.g. the Pain Toolkit) Identify the circumstances when urgent referral to other specialists is indicated. Identify the circumstances when referral to a community or hospital-based MDT Pain Team is indicated.

Subject 18. Paediatric MSK Conditions

Knowledge **Should be able to describe….**	**Skill** **Should be able to……**
The common MSK conditions and their presentation within the Paediatric population including: • Apophysitis • Scheuermann's Disease • Juvenile Degenerative Disc Disease • Pars interarticularis injury • Slipped Upper Femoral Epiphysis (SUFE) • Perthes • Osgood-Schlatters • Severs • Juvenile Inflammatory Arthritis The important alternative diagnoses including: • Infective Disease • Malignancy • Non-stress injury trauma The unique biopsychosocial context that having a chest wall and thoracic region pain state demonstrates for different patients	Identify when and which diagnostic tests are appropriate and are not appropriate. Identify the populations with an increased incidence of these conditions (e.g. age, gender, ethnicity, family history, activity levels) Apply the core recommendations around community-based management including: • Education • Activity Modification • Analgesia & Pharmacotherapy as appropriate • Physio supervised & community-based exercise rehabilitation Identify the circumstances when referral for emergency and/or specialist review are indicated, including any pre-referral tests that may be indicated

Exam Format
The DipMSK exam will last for 3 hours.
The exam is comprised of 180 multiple choice **single best answer** questions (SBAs)

Pass mark
What is the pass mark for the DipMSK and how does standard setting work?
The DipMSK uses a pass mark that has been standard set. Standard setting is a recognised evidence-based method (modified Angoff) to set the standard and pass mark. The method results in a criterion-based standard that takes into account the difficulty of each question and the level at which the examination is set. As a result, the pass mark is likely to change from diet to diet depending on the questions selected for each paper.

A panel of carefully trained representative practitioners implements the standard setting procedures for the DipMSK. The panel reviews the questions, bearing in mind the standard a competent community practitioner should achieve.

Why is standard setting used?
The aim of standard setting is to improve the fairness and validity of the exam process and to set levels of competence for exam success.
The use of standard setting bears no relationship to the percentage of candidates who will succeed in the exam, or to any other external factors.