Faculty of Sport and Exercise Medicine UK

Moving Medicine

Modernising Musculoskeletal and Physical Activity Medicine

A multidisciplinary workforce to support the NHS

PRODUCED BY

The Faculty of Sport and Exercise Medicine UK

Contents

The Faculty of Sport and Exercise Medicine UK

Our vision is to improve the health of the nation through physical activity

We are an inclusive, multidisciplinary faculty. We are a joint faculty of the Royal College of Physicians and the Royal College of Surgeons of Edinburgh. Our consultant physicians work across secondary and community care to deliver our vision of improving the health of the nation through physical activity.

We deliver this vision in two ways. Firstly, we provide high quality, evidence based musculoskeletal medical services through a supportive, multidisciplinary model. Secondly, we work with all healthcare professionals to encourage and facilitate the delivery of physical activity as a core, preventative, healthcare intervention. We are focussed on finding solutions to the current problems the NHS faces surrounding musculoskeletal and physical activity medicine.

The Faculty of Sport and Exercise Medicine UK (FSEM) drives up standards of both musculoskeletal and exercise medicine through examinations and ongoing professional support and development. Our specialty training programme delivers consultants capable of leading, supporting and developing the wider team of general practitioners, physiotherapists, nurses and other allied health professionals (AHPs) needed to deliver musculoskeletal and physical activity medicine for all. Our diploma examinations encourage this team to develop their knowledge and capability through recognised qualifications and our accreditation plans will provide a governance framework for GPs with Extended Roles (GPwERs). Our faculty works with partners across healthcare to align our vision and maximise our collective capabilities.

Our focus on physical activity, through our global programme, Moving Medicine, prevents falls, improves outcomes from expensive medical treatments, reduces the length of hospital stays, improves transfer of care and reduces health inequalities.

Our rapidly expanding membership has the capability to deliver treatment and prevention for the NHS both now and into the future.

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Dr Natasha Jones

MBBS, FRCP, FFSEM(UK), Dip Sports med., RCSEd, PG cert MSKUS

Foreword

Consultants in sport and exercise medicine (SEM) are experts in the management of musculoskeletal conditions in the general population and are trained in the use of physical activity in the prevention and treatment of illness and injury.

They work closely with their AHP and general practice (GP) colleagues to help improve the health and wellbeing of their patients. They have a vital role to play in improving the health and productivity of the nation and yet there are very few doctors in the UK currently trained to this level.

Musculoskeletal (MSK) conditions have a significant impact on the health of this nation. One third of the UK population live with a musculoskeletal condition and over 28 million working days are lost every year due to them. Back pain alone costs the economy an estimated £10 billion a year in medical and indirect societal costs. MSK conditions have severe consequences for the individual in terms of pain, loss of function and increased risk of disability. Moreover, the health and social consequences of these conditions are greater in areas of deprivation and poverty. MSK conditions have a huge effect on the economic productivity of the country which - along with mental health conditions – are the biggest cause of working days lost in the UK.

It is well established that many MSK conditions can be prevented and managed using physical activity, however the evidence for the benefits of physical activity in other conditions is growing rapidly. Physical activity not only reduces the risk of cardiovascular disease it is also an effective treatment for many physical and mental health conditions and has been proven to reduce the risk of recurrence in certain cancers. Consultants in sport and exercise medicine are trained in designing population-based physical activity interventions but also have the expertise to direct exercise programmes for individuals to aid their recovery after injury and conditions including cancer, neurological and rheumatic disease.

To significantly improve the management of musculoskeletal and the other conditions outlined above we need:

- **An increase in consultant numbers**
- **An increase in specialist training posts across all four nations**
- **SEM involvement in commissioning of MSK services nationally to build sustainability and diversity into the workforce**

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Dr John Etherington CBE
MBChB MSc FFPMRCA(Hon) FFSEM(UK) FRCP

Executive Summary

The NHS has an inadequate number of skilled SEM consultants to support the system with the growing care demands of the UK population. This has a negative impact on morbidity, work absenteeism and on the wider teams providing their care.

SEM Consultants have demonstrated their value within the MSK and physical activity workforce in multiple tertiary care, secondary care, and community care settings since 2007. Despite this, of 42 integrated care systems across the UK, only around 15 currently benefit from this expertise. Those who do employ SEM consultants are generally also training locations.

The strategic aims of our newly established integrated care systems include a focus on productivity, population health, prevention and reducing inequalities. A confident, well trained, professionally supported, integrated MSK workforce will deliver on all of these strategic aims. This document sets out how SEM consultants contribute to this workforce and, in particular, the value they add.

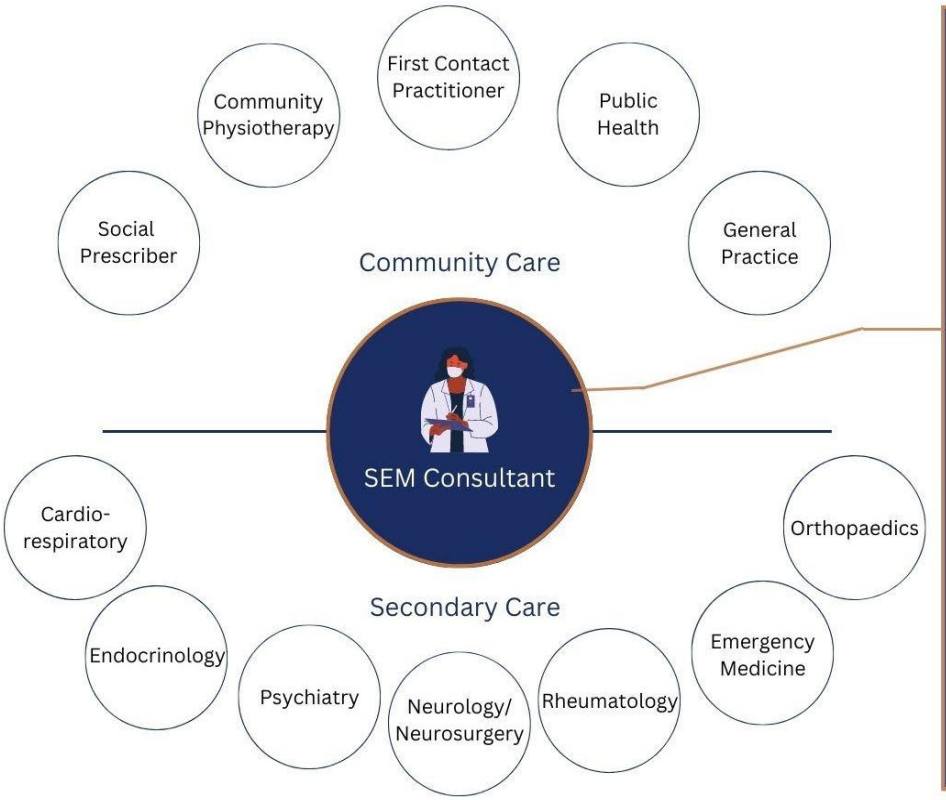
The success of the Long Term Plan depends on the success of collective endeavour. In other words, it relies on clinicians working together across systems to deliver best care for patients. SEM consultants routinely work across systems both by upskilling and supporting the system wide MSK team and by working with all healthcare professionals to encourage them to have impactful conversations about physical activity.

The Getting It Right First Time (GIRFT) project team has made several recommendations in relation to care of patients with non-inflammatory, non-orthopaedic conditions. Importantly, they confirm that these patients should not be routinely managed through core rheumatology services. They however make no recommendations about who is best placed to care for these patients although they do state that these patients are best managed in community settings.

As a specialty already focussed on multi-professional working there is a need to change the approach to national workforce planning. Future planning must focus on the value a SEM consultant adds, not only to the care of individual complex patients but to support the development and upskilling of a sustainable and affordable multi-professional workforce. In particular:

- Developing GPs' confidence and motivation to treat musculoskeletal conditions.
- Working alongside advanced practice physiotherapists and other advanced health professionals to deliver effective care to the greatest number of patients through shared education and training and advice and guidance.
- Supporting healthcare professionals across the system in routinely engaging in integrated impactful conversations about physical activity at every appropriate contact.
- Contributing to clinical governance, standard setting, examinations, and accreditation of a future multi-professional workforce.

Workforce infographic summary



Multi-disciplinary Team Working
- Team leadership
- Education & interdisciplinary upskilling
- MSK triage

'One Stop Shop' for Integrated MSK Care
- Early assessment & management of soft tissue injuries
- Diagnosis & management of complex MSK issues
- Ultrasound
- Injections
- Functional rehabilitation planning
- Complex pain management
- Tendinopathy

Complex and Multisystem Disease
- Concussion
- Relative energy deficiency

Physical Activity Medicine and Exercise Prescription
- Cardiopulmonary exercise testing
- Public health interventions
- Chronic health conditions eg. diabetes, heart failure/cardiomyopathies, mental health
- Surgical prehabilitation
- Long COVID
- Managing co-morbidity

Testimonial

Amanda Hensman-Crook FCSP MSc PhysDip, Chair national MSK Partnership Group, National MSK SME

"Never before has it been so important for the multi-professional MSK community to come together to provide a personalised approach to care to address the MSK burden and related health inequalities in the system. Each MSK profession and subspecialty has a vital role to play utilising their unique skill in addition to their common base. As consultant practitioners, SEM Consultants are well placed to provide multi-professional cross system leadership, and essential to support the learning and development of the workforce, especially around physical activity, relative energy deficiency and complex pain management. The SEM skillset is central to support the MSK recovery plan and to build a bright future for MSK conditions."

Introduction

Millions of people in the UK have an MSK condition. It accounts for 30% of GP consultations in England and 28 million working days lost per year. MSK pain limits mobility, reduces physical activity and therefore contributes to the development of many other conditions such as obesity, diabetes, cancer and vascular disease. It is of paramount importance that people with MSK pain receive rapid, high quality, evidence-based treatment. This is best provided through a multidisciplinary team (MDT) working across community and secondary care.

At present, a wide team of professionals work to deliver MSK medicine. Rheumatologists, for example, look after people with inflammatory conditions[1] and orthopaedic surgeons look after people who require surgery. However, most people (over 60%) with MSK pain do not fit into either of the above categories, but instead require rapid diagnosis, education and effective treatment plans. This is best provided through an MDT working across community and secondary care. GPs, first contact physiotherapy practitioners, advanced practitioners and community MSK services are required to have the knowledge, skills, and attributes to deliver core MSK medicine as a part of routine care in the community. They are also required to recognise when patients require further specialist intervention and have appropriate, timely referral options.

SEM consultants are an asset to the NHS workforce. Through a training programme encompassing acute and emergency medicine, rheumatology, trauma and orthopaedics, general practice, paediatrics, public health and rehabilitation medicine, SEM consultants develop a unique breadth of knowledge and skills that benefit patients in primary and secondary care.

Consultants in SEM are ideally placed to lead MDTs spanning community and hospital locations for care delivery fitting with the new integrated care systems. They provide services for more complex patients, who may require specialist diagnostics and/or more supported medical treatment intervention and plans. They also support the wider team across primary and community care, providing advice and guidance, education and professional development opportunities. They work across multiple services including pain management services, rehabilitation pathways and are key consultants in long covid services where they utilise both MSK and exercise medicine skill sets.

Consultants in SEM also focus on physical activity in the prevention and treatment of disease. They work with colleagues across healthcare to support and provide resources enabling them to integrate physical activity into treatment pathways at every possible opportunity. For example, improved mobility, strength, and conditioning can remove the need for surgery thus reducing the current and increasing demands on elective orthopaedic departments. Where patients need surgery, their contribution to pre-op preparation reduces hospital length of stay, inpatient falls and complications of surgery thus improving

surgical outcomes, successful transfer of care and transforming hospitals from places of enforced rest to places of enabled activity[1].

Clusters of NHS patients have benefitted from the expertise of consultants in SEM for 15 years, both in teaching hospitals and in the community. They have demonstrated their value within these regional settings. The NHS now faces unprecedented backlogs following the covid pandemic. We require more consultants in SEM working across the UK to deliver evidence based, musculoskeletal and physical activity medicine at scale across the NHS. Increasing the SEM consultant workforce is part of the solution to the current NHS burden resulting from MSK problems and the consequences of physical inactivity.

We have recorded realistic workforce requirements for SEM consultants and training posts, based on system knowledge to meet the demand for non-orthopaedic, non-inflammatory MSK conditions. We have recorded this per 100,000 population to provide a framework for integrated care systems to commission effective MSK and physical activity services.

Testimonial

Nina White, Clinical Services Manager, Shropshire Orthopaedic Outreach Service (SOOS)

"Having a SEM consultant lead for a service has been invaluable. A SEM consultant brings clear direction and conviction on conservative management options for patients and builds confidence in team members. Medical leadership is invaluable in supporting a change in culture bringing with it the trust of the patient and credibility with medical colleagues. Peer to peer influence is important. Having a SEM consultant lead has been an effective bridge between primary and secondary care – and in my experience, is less influenced by competing agendas.

SEM consultants bring an extraordinary level of resilience which helps to empower a growing body and voice of advanced practice (physiotherapists and podiatrists) as it pushes forward in a crowded arena, to champion patient access to evidence based conservative management.

SEM consultants bring the ability to manage a higher level of risk, and to articulate and drive service standards and governance. As a clinical service manager I have found that sense checking by our SEM consultant has supported decision making by adding pace and rigour, and this in turn has provided a platform for innovation.

On a practical level having a SEM consultant has attracted registrars, visiting GPs with extended roles and many others to spend time in the service. This raises our profile and improves recruitment and retention. Furthermore, the association with FSEM has enhanced our engagement with the MSK diploma – validating and celebrating team members' MSK knowledge."

[1] Active Hospitals Toolkit: Case Studies [Internet]. Moving Medicine. 2020 [cited 2023 Jan 3]. Available from: https://movingmedicine.ac.uk/active-hospitals/deliver/case-studies/

Building an integrated musculoskeletal and physical activity workforce for the future

We are calling for:

Increase in SEM consultant posts

A new focus on recruitment of SEM consultants within integrated care teams: 4 whole time equivalent (WTE) SEM consultants per million population to support GIRFT recommendations and leadership across the MSK pathways

Existing MSK pathways in England operate with approximately 1 SEM consultant per 250,000 population. This would be a minimum requirement to meet GIRFT objectives. SEM consultants complement the rheumatology and/or orthopaedic teams. The British Society for Rheumatology (BSR) estimates that one rheumatologist is required for every 60-80,000 population[2]. SEM consultants are well placed to support rheumatologists to meet the demands of their patient population within this target by working differently integrated into the rheumatology team. In one model where SEM consultants operate within rheumatology, there is 1 WTE rheumatologist per 108,000 population complemented by 0.4 WTE SEM consultant.[3]

In the military there are 18 WTE SEM consultants looking after 250,000 personnel, a ratio of 1 SEM consultant: 14,000 personnel. This reflects the higher incidence of MSK injury in this population.

Testimonial

Dr Jo Lambert, GP with Extended Role in SEM

"As a GP with an interest in SEM, having the opportunity to train and work alongside the SEM team was excellent. It increased my knowledge, confidence and ability in managing MSK problems in primary care. My patients get better care as a result and I refer less to secondary care. I am also able to work closely with our in-house NHS physio, discussing and managing complex MSK patients, as well as teaching my colleagues on MSK topics, further reducing MSK referrals."

[2] Crisis in rheumatology: report finds dangerously high workforce shortages [Internet]. www.rheumatology.org.uk. 2021 [cited 2023 Jan 3]. Available from: https://www.rheumatology.org.uk/news/details/Crisis-in-rheumatology-report-finds-dangerously-high-workforce-shortages

[3] The Oxford Model: Integrated Musculoskeletal and Physical Activity Care Services, Oxford University Hospital NHS Trust.

Increase in SEM consultant training posts and locations

Increased SEM consultant training posts to 70-80 training posts nationally

The current average annual SEM training numbers per year are 11. Average annual rheumatology numbers are 43[4]. Based on the suggested model above, SEM training numbers will need to increase to 18-20 per year over the next 5 years to meet the consultant post demand.

Increased SEM specialty training locations

With an increase in training posts, we propose a plan for developing training locations across the full 9 HEE regions to reduce health inequalities and variation in clinical delivery.

Include SEM Involvement in commissioning of MSK services nationally to build sustainability and diversity into the workforce

Adoption of a joined-up approach to MSK service planning across the integrated care system understanding the role of SEM consultants within the whole system as leaders and educators as well as clinicians. Involvement of SEM consultants into integrated care board planning for NHS pathway provision. SEM consultants can provide leadership in the development of commissioning documents or service specifications for MSK care. This would include continuing to support national MSK standards development and implementation and provision of education to the MDT recruited to deliver MSK care[5].

A SEM consultant as a dedicated, named commissioning lead for each ICB for MSK care.

Case Studies

The following brief case studies are examples of SEM-led MSK services. Importantly, they are locally designed to work for each community and its partnerships to deliver sustainable and high quality MSK care.

- In Case 1, Oxford Model, SEM is based in secondary care (within rheumatology directorate). In this model the SEM team delivers physical activity services across the trust as well as providing training for SEM as well as multiple other specialties.
- In Case 2, Hampshire Model, SEM is again based in secondary care (within orthopaedic directorate).
- In Case 3, Manchester Model, SEM is based in community care as part of a large national provider, Connect. In this model SEM delivers care within the community but also offers training opportunities to the local SEM training scheme.
- In Case 4, Imperial Model, SEM is based within Accident and Emergency (A&E) service

[4] Rheumatology | ST3 Recruitment - Full, comprehensive guidance on applying to ST3 posts [Internet]. phstrecruitment.org.uk. [cited 2023 Jan 3]. Available from: https://phstrecruitment.org.uk/specialties/rheumatology

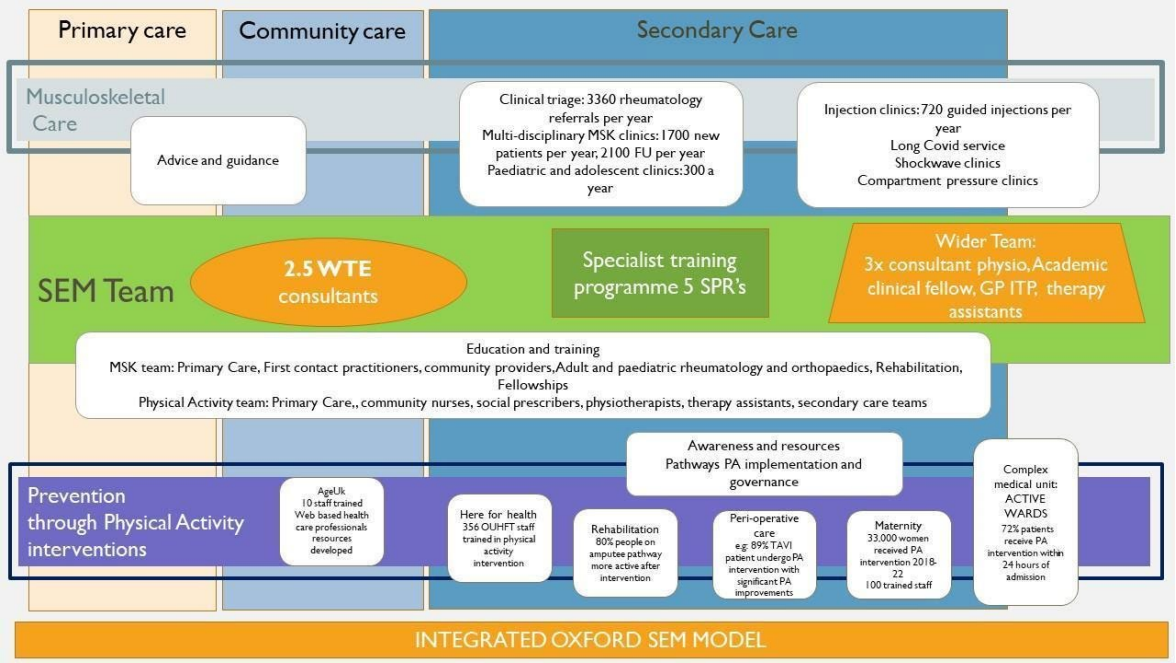
[5] http://arma.uk.net/wp-content/uploads/2022/10/UK-MSK-AdvancedPractice-Standards-FINAL.pdf

Case Study 1: The Oxford Model

Covering a population of 700,000. SEM sits within the rheumatology directorate. It is comprised of:

- 2.5 WTE SEM including 0.5 working within community care
- 6 WTE rheumatology including academic honorary consultants
- Triage all MSK and rheumatology referrals
- Manage>60% of rheumatology referrals within MSK service

The SEM workforce is adaptable in terms of new ways of working, embracing wider workforce and providing training and leadership for the MDT. We have a wide influence through a vertical and horizontal training, education and clinical support model. Nationally all Oxford SEM consultants lead OHID on Moving Medicine and active hospital projects.



Testimonial

Professor Karen Barker OBE, Clinical Director for Orthopaedics, Rheumatology and MSK Medicine, Oxford University Hospitals NHS Foundation Trust

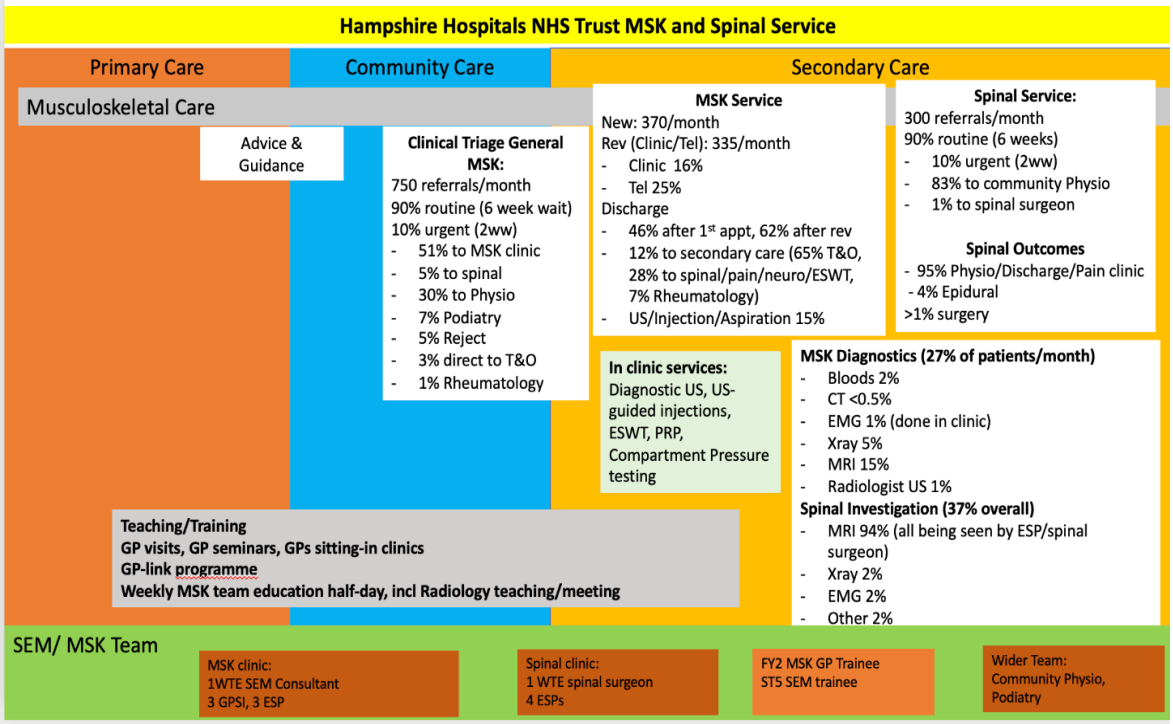
"The input of SEM consultants, who work alongside physiotherapy, rheumatology and orthopaedic colleagues, has been invaluable in ensuring that patients with chronic MSK conditions are seen and helped by appropriate clinical services in a timely manner. Over the last 12 years our SEM service has been integral to the overall MSK care service in Oxfordshire. In addition, our SEM consultants work with other clinicians across the trust and in community and primary care to develop knowledge, skills and tools to support physical activity intervention in healthcare."

Case Study 2: The Hampshire Model

Audit of integrated care services provided by Hampshire, within orthopaedic directorate.

Audit of ~2000 referrals in 3 month period.

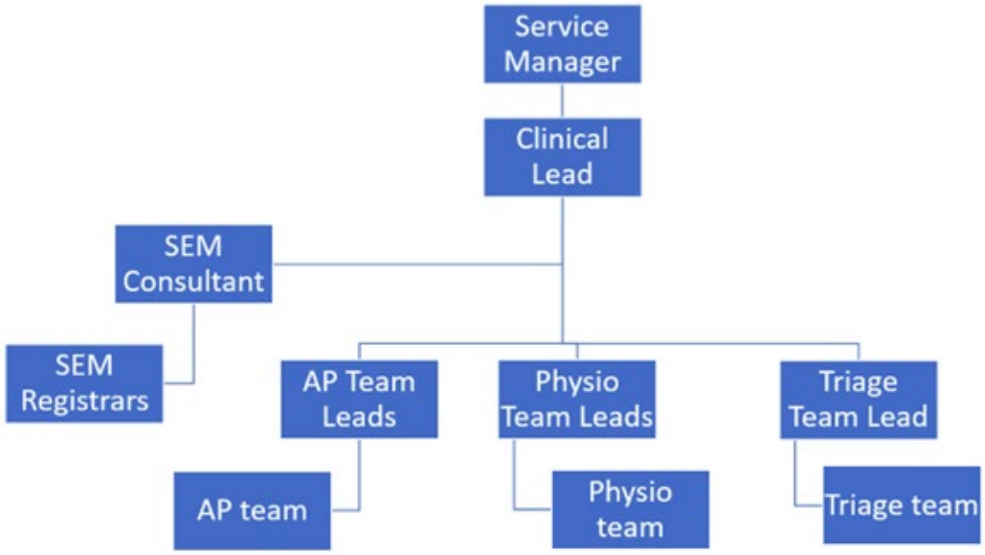
- 87% triaged and managed by SEM consultant led MSK team
- Of the 13% referred on to orthopaedics, conversion rate to surgery was 83% suggesting appropriate referrals for surgery



Case Study 3: The Manchester Model

Connect Health acquired the North West Clinical Assessment and Treatment Service (NWCATS) contract in January 2021 and had a clear vision to replace the existing Orthopaedic led service with a community MSK model that is AHP led, incorporating 2 WTE substantive consultant SEM roles providing leadership and clinical oversight, education and governance. The Connect sites are GMC registered training locations for SEM.

- Only 4% patients seen by SEM consultant service referred on to orthopaedics
- 1% of patients seen by SEM consultant service referred on to rheumatology
- 87.5% of patients in the service likely to recommend



Testimonial

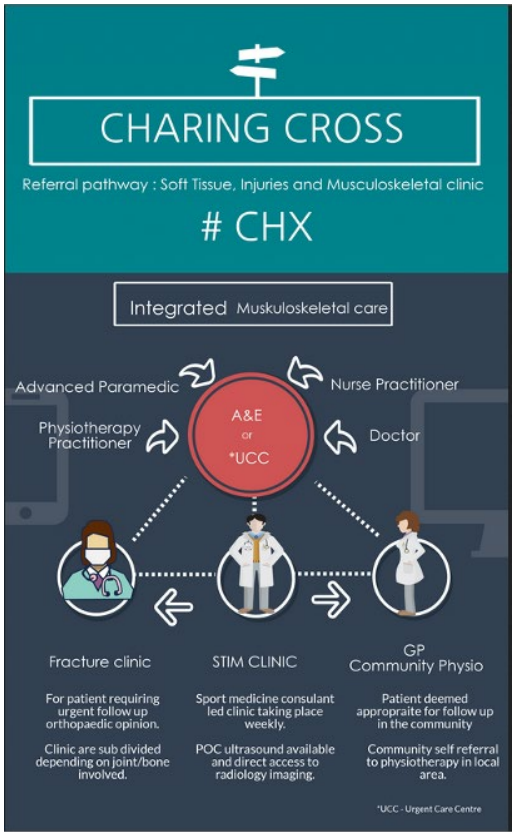
Dr Graeme Wilkes, Chief Medical Officer, Connect Health

Connect Health provides intermediary care MSK services across the UK. Dr Wilkes said: "Spending more and more public money on diagnostics, complex procedures and operations is on its own not the answer. At Connect in recent years we have been employing more and more SEM consultants to contribute as experts on MSK care and physical activity and to provide essential leadership both to fellow health professionals but also to NHS managers and the public."

Case Study 4: The Imperial Model

The Soft Tissue Injury and Musculoskeletal clinic (STIM) at Charing Cross seeks to manage patients caught in the “Soft Tissue Gap” - where patients previously seen in A&E with a soft tissue injury are either referred to fracture clinic (filling up Orthopaedic clinics with patients that often do not require operative management) or are simply discharged from A&E without follow up or rehabilitation.

- Onward referral rate at 8%
- 95% of patients rated the clinic as good or very good.



Understanding the challenges

We know that MSK conditions are widespread, with many implications for health and care. We also know the dangers of physical inactivity. Even more concerning, we know that those who suffer from long term conditions such as MSK problems are among the most likely to be inactive, despite having the most to gain from moving more. We also know that those experiencing the greatest health inequality are most likely to be physically inactive. It is imperative that we find a way to bridge that gap.

The burden of non surgical, non inflammatory musculoskeletal disease is high

One third of the UK population live with a musculoskeletal condition (20.3 million)[6]. 1 in 5 of adults consult their GP every year for their MSK condition, consisting of 1 in 7 of all GP consultations available[7] . As a result of pain and disability, 28 million working days are lost a year due to MSK conditions[8]. Back pain alone costs the economy an estimated £10 billion a year in indirect costs including NHS healthcare and other medical costs[9]. MSK conditions are also more common in areas of greater poverty, and deprivation is also linked to chronic pain[10,11]. There are therefore huge financial and healthcare implications associated with the MSK disease burden in the UK.

The burden of physical inactivity is high

Physical inactivity accounts for 1 in 6 deaths in the UK today. Physical inactivity now kills more people than smoking. It is the 4th highest cause of ill health in the UK. Physical inactivity is a key driver of health inequalities. One in four adults living in the UK today are classified as physically inactive[6]. People living with long term conditions are particularly inactive, despite them being the group with the most to gain from small improvements in physical activity level. Hospital deconditioning is a primary cause of failed transfer of care and poor medical and surgical outcomes. Physical activity reduced post-operative complications and length of stay in hospital[12].

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[6] Musculoskeletal disorders, Global Burden of Disease Study 2019 (GBD 2019) [Internet]. Institute for Health Metrics and Evaluation. 2020 [cited 2023 Jan 3]. Available from: https://www.healthdata.org/results/gbd_summaries/2019/musculoskeletal-disorders-level-2-cause

[7] Office of National Statistics. Office for National Statistics [Internet]. Ons.gov.uk. 2022. Available from: https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/sicknessabsenceinthelabourmarket/2020

[8] Jordan KP, Kadam UT, Hayward R, Porcheret M, Young C, Croft P. Annual consultation prevalence of regional musculoskeletal problems in primary care: an observational study. BMC Musculoskeletal Disorders. 2010 Jul 2;11(1).

[9] Maniadakis N, Gray A. The economic burden of back pain in the UK. Pain. 2000 Jan;84(1):95–103.

[10] Public Health England Fingertips Musculoskeletal Conditions Profile. GP Patient Survey 2020 data. [Internet]. fingertips.phe.org.uk. 2021. Available from: https://fingertips.phe.org.uk/profile/msk/data

[11] Chronic pain in England: Unseen, unequal, unfair [Internet]. Versus Arthritis. 2021. Available from: https://www.versusarthritis.org/about-arthritis/data-and-statistics/chronic-pain-in-england/

[12] Perioperative - Reduces post-operative complications and length of hospital stay [Internet]. Moving Medicine. 2021 [cited 2023 Jan 3]. Available from: https://movingmedicine.ac.uk/evidence/perioperative-reduces-post-operative-complications-and-length-of-hospital-stay/

Physical inactivity and musculoskeletal disease are inextricably linked

Regular physical activity reduces the risk of some chronic MSK conditions by up to 25%[13]. Furthermore, people with long term MSK conditions are twice as likely to be physically inactive[14]. These individuals have much to gain from becoming more physically active, by helping improve mobility and independence as well as reducing pain. Pain and lack of physical activity also contribute to the development of many other conditions such as obesity, diabetes, cancer and vascular disease[6]. By the age of 65, 5 out of 10 people with heart, lung or mental health problems also have an MSK condition[7]. As our population ages and retires later in life, more people will live and work with an MSK condition. Furthermore, half of people with MSK conditions do not feel they are able to themselves lessen the impact the condition has on their lives[15]. It is therefore of paramount importance that we promote healthy ageing through a focus on evidence-based effective prevention and management strategies that need to become ubiquitous within the NHS.

[13] Choi BK, Verbeek JH, Tam WW-S, Jiang JY. Exercises for prevention of recurrences of low-back pain. Cochrane Database of Systematic Reviews. 2010 Jan 20;

[14] Public Health England. Musculoskeletal health: 5 year prevention strategic framework [Internet]. GOV.UK. 2019. Available from: https://www.gov.uk/government/publications/musculoskeletal-health-5-year-prevention-strategic-framework

[15] Versus Arthritis. The State of Musculoskeletal Health 2021 [Internet]. Versus Arthritis. 2021. Available from: https://www.versusarthritis.org/about-arthritis/data-and-statistics/the-state-of-musculoskeletal-health/

SEM Leadership Profiles

Dr John Rogers FFSEM

Dr Rogers trained in general practice in Manchester and worked as a GP Partner for several years before qualifying as a consultant in sport and exercise medicine. From 2011 he led on the development and subsequent delivery and the NHS MSK Service in South Manchester at Withington Community Hospital, part of Manchester University NHS Foundation Trust. This culminated in the first substantive NHS Consultant SEM post in NW England in 2018.

Based on this service over 10 years, Dr Rogers led the training of over 10 SEM Specialty Registrar doctors as both a clinical and educational supervisor and then as Training Programme Director for SEM in NW England from 2019 to 2022. Through his leadership he has delivered both a vital and modern MSK service and populated the NW region with new SEM Consultants equipped on the delivery of high quality non-surgical MSK care and physical activity interventions in the prevention and treatment of chronic disease.

In addition, on a multidisciplinary team level, Dr Rogers provided leadership on the development of many local doctors and physiotherapists through a Health Education England role and as a Visiting Professor at Manchester Metropolitan University.

Using his considerable experience and knowledge as an SEM Consultant, he has contributed to multidisciplinary team working with SEM as a key contributor. Bringing the unique skills of a SEM Consultant, he has upskilled NHS colleagues on subjects such as the Moving Medicine resources, MSK medicine and concussion management, adding a clear understanding of the value of physical activity and non-interventional components to management of patients with MSK problems.

How do SEM consultants fit into the big picture?

The NHS Long Term Plan outlines more focus on prevention and a move towards providing more services within the community but integrated into primary and secondary care. For MSK this would necessitate populating the whole MSK and physical activity pathway across all sectors with clinicians who can apply health and wellbeing policy and change management in an evidence-based way. This has to be convincing to the public, patients, and their carers plus other healthcare professionals. Such clinicians will necessarily need to be trained and competent in:

- ✓ MSK medicine across the lifespan
- ✓ Physical activity medicine across the lifespan
- ✓ Leading and managing a multidisciplinary team
- ✓ Behaviour change for patients and pathway colleagues
- ✓ Understanding primary care
- ✓ Understanding secondary care
- ✓ Understanding population health
- ✓ Applying a holistic approach encompassing biomedical, psychological, and social determinants of disease not just biomedical
- ✓ Clinical pharmacology and therapeutics relevant to chronic diseases
- ✓ Strong focus on personalised care

These key capabilities are embedded in the SEM training curriculum.
Sport and Exercise Medicine 2021 Curriculum FINAL EB.pdf (jrcptb.org.uk)

SEM services across the UK are still in clusters across the country and, where they exist, they are highly regarded and expanding but there are many areas where SEM is still a new/unknown specialty.

Are there any other health professional groups able to deliver the competencies outlined above?

Currently most healthcare professionals do not receive training in how to successfully implement physical activity interventions into practice. Training on the benefits and risks of exercise, for example, is inconsistently and often inadequately provided at undergraduate and postgraduate levels in medical and nursing degrees[16]. Training on how to embed physical activity into inpatient pathways is not routinely delivered. Training on how to have successful conversations with patients about increasing physical activity is also not routinely delivered. This lack of knowledge and skills in the workforce has led to one of the cheapest and most powerful mechanisms for the treatment and prevention of disease being largely ignored in the NHS from primary through to secondary care.

[16] Weiler R, Chew S, Coombs N, et al. Physical activity education in the undergraduate curricula of all UK medical schools: are tomorrow's doctors equipped to follow clinical guidelines? Br J Sports Med 2012;46:1024–6

General practitioners

The quality of management of MSK conditions by GPs is variable and whilst the introduction of first contact practitioners and advanced physiotherapy practitioners has helped to improve primary care MSK management, there is still a high burden of MSK ill-health in the community. This, combined with the increasing pressures on primary care, is leading to an increase in referrals out of general practice nationally, and poor integration of physical activity into care pathways. There is enormous competition for the limited time and resources in primary care and despite the high prevalence of MSK disorders in primary care they are under-represented in terms of indicators and financial incentives in the Quality and Outcome Framework meaning they may be seen as lower clinical priority and likely result in poorer care[17].

The lack of GP time available is set to drop even further given the current shortage of 4200 full time equivalent GPs which is set to reach 8900 Full Time Equivalent GPs by 2030/31[18].

GPs are just too busy to take on more work and whilst their training provides several of the competencies, by the nature of the generalist and wide role of GPs they are not at specialist level in several competencies required. This applies especially to the MSK and physical activity skillset and it is unrealistic to expect all GPs to reach those levels. GP trainee confidence in managing MSK conditions has been historically low but SEM clinicians are ideally placed to support GPs training with opportunities including additional taught courses, personal learning plans or sitting in with qualified consultants that can lead to higher confidence in managing even complex cases[19] [20]. FSEM is currently working with the Royal College of General Practitioners (RCGP) to create an accreditation pathway for GPs with Extended Roles (GPwER) in MSK medicine which will offer some solutions to those GPs wishing to take it up as part of their ongoing professional development.

Allied Health Professionals

AHPs, and physiotherapists in particular, are key to delivery of MSK and physical activity support and advice. AHPs at all grades are essential to the vision and delivery and a partnership approach with SEM consultants, as illustrated in examples elsewhere in this document, is, we believe, the key to success. SEM consultants and AHPs need to be close partners in delivery.

Secondary care - orthopaedics and rheumatology

Orthopaedic and rheumatology consultants, whilst undoubtedly highly specialist in their field, do not necessarily have the widespread capabilities and competencies achieved through specialist SEM training. It is increasingly inappropriate for patients with non-inflammatory, non-surgical conditions to be managed through core orthopaedics and

[17] NHS England» GP Contract 2022/23 financial information [Internet]. www.england.nhs.uk. Available from: https://www.england.nhs.uk/gp/investment/gp-contract/gp-contract-2022-23-financial-information/

[18] Projections: General practice workforce in England - The Health Foundation [Internet]. www.health.org.uk. 2022. Available from: https://www.health.org.uk/publications/reports/projections-general-practice-workforce-in-england

[19] Goff I, Wise EM, Coady D, Walker D. Musculoskeletal training: are GP trainees exposed to the right case mix for independent practice? Clinical Rheumatology. 2014 Sep 6;35(2):507–11.

[20] Roberts C, Adebajo AO, Long S. Improving the quality of care of musculoskeletal conditions in primary care. Rheumatology [Internet]. 2002 May 1 [cited 2020 Apr 6];41(5):503–8. Available from: https://academic.oup.com/rheumatology/article/41/5/503/1778912

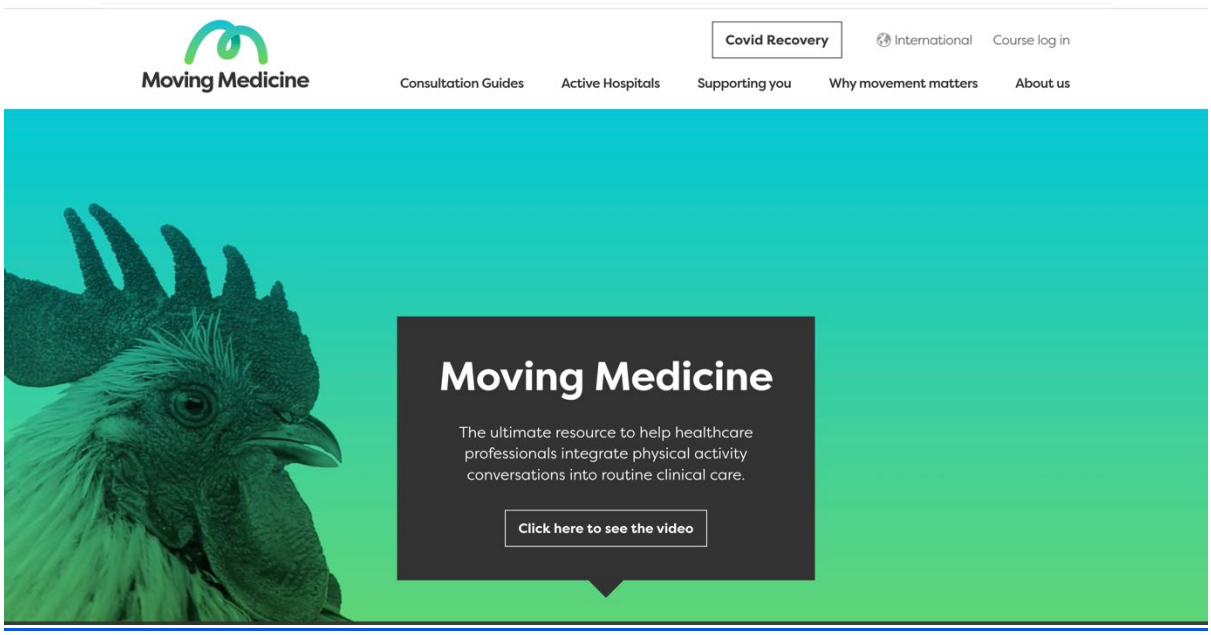
rheumatology services[21]. So, whilst these professionals are vital in MSK pathways, they are only part of the solution to the main issues that exist in MSK and chronic disease presentations today.

How do SEM consultants make a difference?

Physical activity medicine

SEM consultants work with colleagues across heath to refocus on the importance of physical activity as a part of medical care. Our approach and in particular the Moving Medicine project is recognised globally as a world leader for physical activity in healthcare.

Nationally SEM physicians have been working in partnership with multiple Medical Royal Colleges, Faculties, membership organisations and patients to provide this knowledge and resource to enable healthcare professionals to embed physical activity into treatment pathways. Through the Moving Medicine programme and Active Hospital Programme, healthcare professionals now have access to disease specific consultation guides, hospital pathway guides, governance frameworks and patient facing resources. These resources have been well received by healthcare professionals with national and international recognition and over 200,000 multidisciplinary users to date and >65% of healthcare users giving the resources 10/10 for quality. They have worked at a system level to provide locally competent microsites joining up healthcare and sports partnerships. And they are working collaboratively every day at a local level to bring these resources to healthcare providers, to advocate for physical activity and to support teams to deliver effective, safe interventions to multimorbid patients across treatment pathways.



[21] Rheumatology [Internet]. Getting It Right First Time - GIRFT. [cited 2023 Jan 4]. Available from: https://gettingitrightfirsttime.co.uk/medical_specialties/rheumatology/

MSK medicine
SEM consultants are trained across the breadth of musculoskeletal medicine, in rehabilitation medicine, and in public health. In addition, they are trained in how to integrate physical activity into all healthcare pathways. They are focussed on reducing referrals through education and training across the workforce, clinical triage and advice and guidance. They provide personalised care with a strong focus on the determinants of meaningful behavioural change. They treat patients across the lifespan from children and young people to older adults. SEM consultants are able to benefit NHS patients working both horizontally and vertically throughout integrated care systems. In short, SEM consultants embedded within integrated care systems deliver all of the NHS's best practice solutions including all of the high impact interventions.

Upskilling and continual professional development of the workforce
SEM consultants are well placed to support training, upskilling and to professionally develop clinicians across the integrated care system and nationally.

Contributing members of the MDT include GPwER, first contact physiotherapists, podiatrists and psychologists, all of whom can have critically valuable input to MSK conditions from assessment to diagnosis and to long term management. SEM consultants improve the capacity, effectiveness and efficiency of this workforce by supporting and upskilling the wider team.

SEM consultants support primary care teams by providing education and training and clinical supervision at a local and national level. They work with physiotherapy colleagues to complement their skillset by providing advice and guidance and direct clinical care, where needed, for the more complex presentations. They work with secondary care nursing, therapy and medical colleagues, for example with surgical teams to integrate physical activity into peri-operative pathways and with medical teams to help reduce hospital deconditioning. They can provide a governance structure for these pathways focussing on effectiveness and personalised care. They work with undergraduates across healthcare to integrate both MSK and physical activity medicine into curricula.

Other specialist treatment areas
SEM consultants possess the knowledge and skills to identify these conditions below and coordinate a multidisciplinary approach to offering patients personalised and holistic care.

- **Concussion:** Concussion is poorly managed in the NHS resulting in under-diagnosis and unacceptable risk to children, young people and recreational athletes. SEM consultants intervene through education in primary care and ED as well as managing more complex concussion in consultation with a MDT.
- **Long Covid:** SEM consultants are valuable members of multidisciplinary teams necessary to care for people with long-covid where they provide expertise in the MSK pain elements of this condition as well helping manage fatigue and sleep disorder. SEM consultants and trainees work in long covid services across the NHS.
- **Children and young people's sport and exercise related injuries:** SEM consultants are trained in the management of the musculoskeletal conditions unique to children and young people and work across the country in specialist tertiary care services.

SEM Leadership Profiles

Dr Alastair Jones MFSEM

Dr Alastair Jones is a sports medicine doctor and consultant in emergency medicine. He obtained a Fellowship to the Royal College of Emergency Medicine in 2011. Dual qualified in emergency medicine and SEM, he also holds Membership of FSEM and was the Macleod Medal winner in 2019 for the highest score in the faculty membership examination that year.

Dr Jones is the Clinical Lead for the Minor Injury Unit and Musculoskeletal Service at the Bradford Royal Infirmary and created and led the development and operation of the innovative Acute Musculoskeletal Clinic in Bradford designed to remove the huge demand on the Trust Fracture Clinic from Acute care. This is a multidisciplinary clinic specifically designed for active patients who have suffered musculoskeletal injuries. The clinic comprises SEM/MSK physicians, physiotherapists, radiologists and orthopaedic surgeons. The clinic's mission statement is to take the individual from injury back to work, utilising the principles of GIRFT to get the patient in front of the correct specialist first time, reducing unnecessary appointments/investigations and their associated healthcare costs.

Driving through the business case in 2014 with NHS managers , Dr Jones led the first clinic in that year - one morning a week staffed by Dr Jones and a Physiotherapist seeing 40 patients per month. Now there are five MDT clinics a week (220 patients a month) with "in-clinic" MSK ultrasound and next day MRI scanning and speedy onward orthopaedic/physiotherapy referral for patients that require it. This absolutely fits with the GIRFT agenda and provides an excellent integrated and cost-effective service for those who have attended acute care with a large range of MSK problems.

Dr Jones has further led on an MSK/SEM Fellowship program which allows emergency department higher speciality trainees to develop their MSK/SEM skills whilst working a 50/50 split with the emergency department plus developed education programs aimed at the hospital's junior doctors and AHP's on management of MSK injuries using a SEM approach.

Dr Jones provides a substantial example of how FSEM and its members/fellows can lead on integration and modernisation of NHS pathways, meet the GIRFT strategy and contribute to a more cost-effective use of NHS and taxpayers money.

What an integrated and flexible SEM workforce looks like within current structures

The NHS Long Term plan highlights the importance of a flexible integrated workforce to develop and support staff and ensure efficiency. For SEM, this is essential because MSK conditions and physical inactivity are both so common.

An effective integrated workforce depends on:

- A well-functioning interface between primary, community and secondary care. In part, this relies on leadership in developing and supporting the wider workforce and in developing and governing integrated patient pathways. SEM consultants have a track record of working in this manner across the interface. They help to develop and support other clinicians including AHPs, first contact practitioners and GPwERs. They advocate and develop knowledge and skills in physical activity across the interface.

- Effective utilisation of IT-based solutions. In this environment, this includes effective referral and triage systems, interface consultation (advice and guidance), remote consultations and patient initiated follow up systems. It also includes the use of technology to train and develop skills in both physical activity medicine and MSK medicine. As case studies in this document illustrate, SEM consultants have a track record in developing all of the above and delivering governance for these systems.

- Flexibility of consultants in the geographical location they work. Delivering care closer to home often means working in community settings and within local bespoke service models. SEM consultants have a track record of working in multiple settings in primary, community and secondary care. They are employed by secondary care trusts and by community providers and there is often a hybrid approach.

Best MSK integrated pathways

The Best MSK Health Collaborative programme[22] aims to improve the quality and value of MSK provision and sustain the delivery of personalised, evidence-based, integrated healthcare that reduces health inequalities and is available and valued by all.

The Best MSK Health toolkit launched in 2022 and now sits within the GIRFT initiative. It offers best practice clinical guidance to help support service recovery and transformation opportunities for patients in primary and community care, and across the MSK pathway.

The pathways demonstrate the utility of a SEM consultant (MSK specialist) as a leader and clinician and how they can be used to improve the delivery of MSK care to patients. FSEM looks forward to working with GIRFT on the MSK and physical activity agenda.

[22] https://www.england.nhs.uk/elective-care-transformation/best-practice-solutions/musculoskeletal/

Role of FSEM and partnerships

As a small specialty currently, FSEM has embraced key relationships with other, larger organisations to deliver our vision and strategic goals. We are a standard setting organisation committed to raising the standards of both MSK and exercise medicine delivery in the NHS. We understand the importance of working together with our multidisciplinary colleagues to deliver cost-effective but high quality care across our scope of practice.

For example, we work with RCGP in order to support the upskilling of the GP workforce both through diploma and providing GPwER accreditation. FSEM has contributed to the development of the UK advanced practitioner MSK Standards, as part of the expert multi professional reference group, and the upcoming HEE MSK Advanced Practitioner Credential. Our MSK care diploma examination, developed in partnership with the Primary Care Rheumatology and Musculoskeletal Medicine society (PCRMM), attracts both GPs and physiotherapists. Success in this examination affords diplomate membership of our faculty with an ongoing educational support programme and access to all membership benefits.

We are currently piloting a new GPwER accreditation process, run in partnership with RCGP, which will reward those with additional experience and qualifications in MSK care and equip commissioners with the criteria they need to safely employ doctors working in MSK care.

We work with the Office for Health Improvement and Disparities (OHID) on the secondary prevention, physical activity agenda nationally. As key partners in the Moving Health Professionals Programme, we have developed resources to support healthcare practitioners deliver physical activity as a key part of routine clinical practice for both inpatients and outpatients. Our resources have won several RCP excellence awards and have raised the profile of physical activity medicine in the UK on the national and global stage.

The development of a diploma in exercise medicine, which will be open to the whole workforce will support the upskilling of practitioners working with patients with long term conditions and empower them to become more active.

Our approach is inclusive and progressive because we know that cost-effective care is best provided through well supported MDTs.

Testimonial

Dr Giles Hazan, GP with Extended Role in MSK Medicine

“One of the key projects FSEM has embarked on for 2023 is delivering an accreditation pathway for GPs wishing to work in extended roles in MSK - supporting GPs by using the wealth of experience FSEM has in delivering accreditation for SEM consultants. The Faculty has worked with the RCGP, BSR and PCRMM on developing the pathway which sets the standard of excellence for GPs across the country”

Role of FSEM and leadership

Effective Leadership in healthcare has always been important but never more so than now post-Covid pandemic.

Health delivery should be personalised and affordable. “Care” on offer should address the psychological and social determinants of disease.

Active approaches based around prevention, and the importance of physical activity have remained much discussed but largely not delivered.

We will require strong and informed leadership to move forward to reduce the spiralling, out of control demands on healthcare caused by lack of physical activity and conditioning. SEM consultants are well-placed and suitably trained to offer this.

As previously outlined in this document, physical activity is one of the cheapest and most powerful mechanisms for the treatment and prevention of all disease (mental and physical health) but has been largely ignored in the NHS from primary through to secondary care.

As well as having the skills to deliver significant change in public and patient activity levels, SEM is equipped to provide necessary leadership to take the public and health professionals on this journey. The embedded case studies provide current working examples of SEM consultants leading the change required at all levels of NHS pathways.

SEM Leadership Profiles

Dr James Hopkinson FFSEM

Dr James Hopkinson completed GP training in Nottingham in 2002 and developed a special interest in Sport and Exercise Medicine. He initially worked as a clinical assistant 1 day per week and led the development of a community NHS MSK clinic to help manage demand in the system. This was very successful in managing demand whilst getting very positive patient feedback.

He went on to complete SEM consultant training in 2012 whilst continuing to work as a GP partner and joined the Specialist Register going on to work as a SEM consultant in Leicester, before getting a substantive post in Nottingham.

During his SEM training Dr Hopkinson moved into NHS Commissioning and was elected chair of Nottingham North-East CCG in 2015, and subsequently for Nottinghamshire County CCG. Within this key leadership role, he led the commissioning of MSK services across Nottinghamshire, with a focus on quality and outcomes. He led the development of the current musculoskeletal pathway, and currently leads a cross integrated care systems clinical group working to deliver the next iteration.

Dr Hopkinson has been passionate about driving change for the better, leading NHS commissioning on assuring best patient outcomes, and value for money for public money in the NHS always prepared to challenge the status quo.

More recently he has also taken on the role of Lead for Urgent Care, where he plans to implement a truly holistic and integrated approach and hopes to get clinicians more involved in understanding the whole system challenges