1. MSK remote consulting: survival guide

NHSE Referrals Guidance for Adults (23 March) and Children (11 April)

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Context

Since the COVID-19 pandemic began, we have increasingly moved to a hybrid model of consulting, with many more contacts occurring by telephone or video. In this article, we specifically consider remote consulting for MSK conditions.

We focus on:

- What conditions need timely referral.
- Spotting and referring serious/red flag conditions *(these are rare but if we don't think of them, we won't spot them!)*.
- How remote consulting can work for MSK conditions in practice (although the evidence base for this is rather limited).
- Supporting people with MSK conditions and promoting self-care at a time of longer waiting lists and fewer services.

Where there is evidence and guidance, we will share this with you, but particularly around video *examinations,* etc., there is currently an absence of evidence specific to MSK conditions, and we are all working from extrapolated knowledge and consensus.

As with all remote consulting at this time, we should be cautious and constantly weigh the relative harms of COVID infection risk with the unintended consequences of failure to access healthcare.

MSK care in primary care can be provided by many members of our teams. Your team may include first contact physiotherapists, practice nurses, clinical pharmacists and social prescribers, who may all be involved in MSK care. Feel free to share this GEMS with your primary care clinical team!

What should we still be referring?

In many areas, referral and imaging pathways are opening up again for the time being, but perhaps with prolonged waiting lists and reduced capacity. Our ability to weigh up the balance of different risks, offer shared decision-making and promote and support effective self-management has never been more important!

There are, however, some conditions that need referring regardless of other clinical circumstances. NHSE defined these at the beginning of the pandemic as follows:

Emergency (same-day) referral:

Adults with suspected:

- Cauda equina syndrome.
- Cervical myelopathy.
- Metastatic spinal cord compression.
- Spinal infection.
- Septic arthritis.
- GCA with visual symptoms

Children with suspected:

- Non-accidental injury.
- Osteomyelitis.
- Septic arthritis.

Urgent outpatient referral:

Adults or children with suspected:

- Inflammatory arthritis/inflammatory spinal pain.
- Autoimmune connective tissue disorders.
- Vasculitides (including giant cell arteritis with no visual symptoms).
- Malignancy (escalating pain, night pain, new or worsening swelling).
- Major spinal-related neurological defect.
- Cervical spondylotic myelopathy.
- Slipped upper femoral epiphysis (occurs in children only).

Why talk about self-care now?

Effective self-care matters for people with long-term conditions because it improves quality of life and satisfaction with medical care, and it reduces primary care attendance AND hospital admissions – and increases our job satisfaction as clinicians. What's not to love? It takes time but at this current time of longer waiting lists and reduced services, it is more important than ever.

We are seeing/talking to these people anyway – this is a different way to spend that time.

Page 5 and 6 of this GEMS focus on self-care in more detail.

2. Red flag MSK conditions: how to spot them and what to do

NHSE Referrals Guidance for Adults (23 March) and Children (11 April) and references in text

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Condition	When to suspect and what to do!
Acute spinal cord compression	The spinal cord itself is compressed, usually by trauma/cancer/abscess or haematoma. Can occur up to any level but remember that spinal cord ends at L1/2 (NEJM 2017; 376:1358) Consider if: • Weakness • Lower motor neurone pattern AT THE LEVEL of the lesion = EVERYTHING goes down (reduced tone, down-going plantars, reduced/absent reflexes). • Upper motor neurone signs BELOW the level of the lesion = EVERYTHING goes up! (increased tone, up-going plantars, brisk reflexes). • New-onset urinary incontinence or retention. • May have a sensory level BUT THIS IS A LATE SIGN – if you suspect and this is absent, still refer! **Refer immediately for CT/MRI and neurosurgery assessment.**
Cauda equina syndrome	Same process as acute spinal cord compression but occurs in the cauda equina (usually below L1/L2). Central disc prolapse is most common cause but can be trauma, cancer, abscess or haematoma. Look for: • Weakness. • Lower motor neurone pattern = EVERYTHING goes down (reduced tone, down-going plantars, reduced/absent reflexes). • Saddle anaesthesia/reduced anal tone. **Refer immediately for CT/MRI and neurosurgery assessment.**
Infection, e.g. discitis, osteomyelitis, septic arthritis or abscess	Relatively uncommon. Consider in IVDU or long-term steroids/immunosuppression, history of TB or children with an unexplained new limp. Note that osteomyelitis may be found in any bone and septic arthritis in any joint. Consider in adults or children if: • Fever/malaise/systemically unwell. • Increasing and unremitting pain; may be aggravated by straining. • May have tenderness over the vertebral body or affected bony area. **Refer immediately to secondary care.**
Trauma	If you are asked to assess a patient with a history of traumatic back pain, we can use the NICE 2016 NG41 guidance to identify who needs urgent imaging and immobilisation; most of us will need to call the paramedics to achieve this. NICE identifies high-risk features as: • Age 65y or older and reporting thoracic/lumbosacral pain. • High risk injury, e.g. fall from height >3m, high-speed or roll-over motor collision, ejection from a motor vehicle, axial load injury, e.g. falling onto feet/buttocks, bicycle or horse-riding accidents. • Known or high risk of osteoporosis. • Abnormal examination findings, e.g. neurological signs, new deformity or midline tenderness, spinal pain on coughing. • Pain or abnormal neurology when mobilising (stop mobilising immediately if this occurs!). **Refer immediately via ambulance (for imaging) if any of these features are present.** If you need to acutely assess a cervical spine, NICE suggested using the Canadian C-Spine rules (link in resources).
Acute limp in children	A new, unexplained acute limp in a child needs careful consideration. Possible explanations include serious causes such as septic arthritis, non-accidental injury, slipped upper femoral epiphysis (SUFE), Perthe's disease, or more benign causes including transient synovitis (BMJ 2010;341:c4250). **Children with an acute unexplained limp who are any of**: • Aged <3y. • Unable to weight-bear. • Febrile or systemically unwell. • Aged >9y reporting hip pain or restricted hip movement (to rule out SUFE). **Refer for same-day assessment in secondary care.** For a **child aged 3y to 9y** who is **well, afebrile, mobile but limping for less than 48h**, a short period of observation is reasonable because transient synovitis is most common in this age group. We should: • Reassess after 48h – if symptoms are resolving, a diagnosis of transient synovitis can be made without further investigation. • Safety-net carefully: if symptoms worsen or the child develops fever or systemic symptoms, urgent reassessment is required. **If the symptoms worsen or fail to resolve after 7d, start investigations.**

3. Red flag MSK conditions: how to spot them and what to do

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<table>
<tr><th>Condition</th><th>When to suspect and what to do!</th></tr>
<tr><td>Suspected inflammatory arthritis or acute rheumatological condition</td><td>Consider the diagnosis based on the history:
• Joint pains and synovitis.
• Early morning stiffness lasting >30 minutes and relieved by exercise.
• Fatigue and systemic upset.
In the presence of a good history, remember that up to 35% may have NORMAL CRP and ESR, and 30% will have normal anti-CCP/RhF – this should not put us off referring. Refer urgently to secondary care.</td></tr>
<tr><td>Giant cell arteritis</td><td>Consider if age >50y and (BMJ 2019;365:l1964) :
• Age at onset >50y.
• New-onset headache (usually temporal but can be parietal or occipital).
• High ESR (>50mm/h).
• Abnormal temporal artery on palpation.
• (Changes consistent with GCA on biopsy – not useful in primary care!).
If 3 out of 5 are present, sensitivity is 93% and specificity 91%. Other features may include visual disturbance/diplopia, scalp tenderness when brushing hair, pain in jaw on chewing or proximal muscle pain/stiffness (may suggest co-existing polymyalgia rheumatica).
If typical history and visual disturbance present, needs same-day referral and ophthalmology assessment.
If no visual disturbance, commence high-dose steroids in primary care and refer urgently to outpatients for confirmation of diagnosis (may want to discuss with secondary care at this time).
(See GPCPD>>>Musculoskeletal Medicine>>>Giant cell arteritis)</td></tr>
<tr><td>Inflammatory back pain: axial spondyloarthritis</td><td>Suspect inflammatory back pain in people with low back pain lasting more than 3m, starting before the age of 45y AND with 4 or more of these criteria (NICE 2017; NG65):
• Onset before age 35y.
• Waking in the second half of the night with symptoms.
• Buttock pain.
• Improvement with movement.
• Improvement within 48h of taking NSAIDs.
• First-degree relative with spondyloarthritis.
• Current or past enthesitis.
• Current or past psoriasis.
If 4 or more criteria present, refer to rheumatology (no further testing required).
If 3 criteria are present, do an HLA-B27 test and refer to rheumatology if positive.
If fewer than 3 of these criteria are met, advise patients to re-present if they have new symptoms, particularly if they have a past or current history of inflammatory bowel disease, psoriasis or uveitis.</td></tr>
<tr><td>Safeguarding</td><td>Any suspicion of non-accidental injury should be treated as at any other time, and be assessed and investigated urgently.</td></tr>
<tr><td>Sarcoma (bone and soft tissue)
NICE NG12 2015</td><td>
<table>
<tr><th>Clinical scenario</th><th>Adults</th><th>Children</th></tr>
<tr><td>Unexplained bone swelling/pain</td><td>Urgent x-ray within 48h</td><td>Urgent x-ray within 48h</td></tr>
<tr><td>Unexplained soft tissue lump that is enlarging</td><td>Urgent USS within 2 weeks</td><td>Urgent USS within 48h</td></tr>
<tr><td>X-ray suggestive of bone sarcoma or USS suggestive of soft tissue sarcoma</td><td>Refer on 2ww</td><td>Refer to be seen within 48h</td></tr>
</table>
</td></tr>
</table>

4. Remote assessment of MSK conditions

Video consultations: a guide for practice by Prof Trisha Greenhalgh, web-based learning resources by Dr Hussain Gandhi (Dr Gandalf of eGPlearning)

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What can be assessed remotely… and what can't?

General remote consulting:

- There is a large body of evidence that video and telephone consulting are broadly safe and acceptable for low-risk patients, particularly those with long-term conditions.
- There is very limited research on their use in an acute epidemic setting or in primary care (this is absence of evidence rather than evidence of absence).
- In order to be effective, it is important to have good, dependable technical connections. If these are not achievable, video offers no benefit over telephone consulting. Major breakdowns in technology disrupt the quality of the remote consultation.

MSK remote consulting in primary care:

Again, there is an absence of evidence focused specifically on the safety, efficacy and acceptability of assessment of MSK conditions in primary care by GPs. A systematic review tells us that *physiotherapists* (J Telemed Telecare 2017; (Epub) DOI: 1357633X16642369):

- Can make a reasonable assessment of range of motion, pain, strength, balance, gait and functional assessment using video conferencing.
- Find it is more difficult to assess lumbar spine posture and scars, and do orthopaedic 'special tests' and neurodynamic tests, e.g. slump test/straight leg raising.
- Think' 'telerehabilitation' (video physiotherapy) is feasible but large studies looking at cost-effectiveness and patient experience still need to be done.

So, with some creativity and good communication, we probably can undertake many aspects of our usual examination (particularly the 'look' and 'move' aspects) using video technology, and still ensure that people with MSK conditions feel they have had a full assessment.

As a team, we think that follow-up consultations for osteoarthritis, non-specific low back pain and chronic pain conditions, including fibromyalgia, can mostly be managed well remotely.

Here are a few tips to remember:

Lighting	Make sure lighting is good on you AND on the patient: this makes a huge difference.
Privacy	Is now a good time to video consult or not, e.g. are they at work? Check if they comfortable to do what you are asking them to do? If another family member is there and offers to help, ensure the patient consents to this!
Camera position	Could the patient prop the phone up somewhere to get a better view/camera position? Could someone else hold the phone for them (with consent)? On smart phones, the camera on the BACK of the phone is often better than the front of the phone but requires a helper. Also ensure that if you are demonstrating movements, the patient can adequately see you!
Take your time – it takes longer!	Ensure you have allowed yourself time. A remote examination will take longer than face to face. (Explain the examination, demonstrate what to do and then guide the patient through!)

Who *should* we see face to face?

This is not a simple question to answer, and the threshold for face-to-face consultations will vary at different times during the pandemic and in different areas depending on local set up. Key considerations are:

Can I assess whether this patient is sick or well and make a next step plan without seeing them? Can I provide adequate safety-netting? Can I start to engage them with self-management, if appropriate? Would a face-to-face examination change my management?

Patients who probably need seeing are:

- Patients with potential high-risk conditions who are likely to need physical examination ***where this may change your management,*** e.g. some of the red flag conditions mentioned in the first section of the article that require a full neurological examination.
- Patients who cannot use or do not have the technology to participate. Examples may include patients with dementia, some learning disabilities, homelessness, some mental health problems and those without smart devices.
- Some deaf or hard-of-hearing patients may find it difficult to participate (video may be better than phone for lip reading or to use chat function).
- **Children and young people –** need to consider if you are hearing 'the voice of the child' or whether there is more deferral to adults. Also need to consider whether potential safeguarding issues may make a face-to-face consultation more appropriate.

5. Promoting and supporting self-management

An introduction to living well with pain (Dr Frances Cole, Robinson, 2017), Promoting optimal self-care: consultation techniques that improve quality of life for patients and clinicians (NHS publications 2005)

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Starting or changing the conversation about self-management in those without any red flags

These questions may be useful to open a conversation about self-management. Word of caution: if this is your first time meeting a patient with a long-term condition, e.g. persistent pain, it will be useful to spend some time hearing their 'pain story' first. You may find this resource helpful: https://livewellwithpain.co.uk/resources/shifting-the-conversation/

- *What matters most to you at this current time?*
- *What support do you need?*
- *Would it be helpful if I talked to you about how lifestyle changes could make a difference to your symptoms?*
- *What changes, if any, are you ready to make? What is the smallest step you could take towards your goal?*
- *We've talked about some things you could do that may help your symptoms. Which, if any of those, sound interesting to you?*
- *Have you ever done anything before that has improved your symptoms/helped your pain/got you more active/helped your sleep? (delete as appropriate)*
- *How have you felt in your mood/mental health over the past few weeks? How are those feelings affecting your day-to-day life?*

In asking these questions, we are trying to assess readiness to actively participate in self-care (*sometimes called self-efficacy or activation*). There are tools to measure this that are used in pain clinics, etc., but, in practice, in primary care we are more likely to make a mental assessment that people may fall into one of three categories:

Ready, willing, able!	*Ready or willing or able, but not all of these!*	*Not ready, not willing, not able!*
Motivated, engaged and knowledgeable	Some motivation but lack of confidence/knowledge	May have complex or chronic history, comorbidities, e.g. mental health problems
• Signpost to appropriate self-care resources. • Agree a time to follow-up on progress towards goals. • Safety-net.	• Coaching approach to build confidence. • Social prescriber input may be helpful. • Sharing knowledge, helping with goal-setting.	• May require a more complex multidisciplinary intervention, e.g. back school, pain clinic. • *It may not be the right time for this person but offer to discuss again when it is*.

Some strategies to build 'activation' or readiness for self-management

	Barriers	Possible solutions
Not READY?	A belief that 'medicine' has more to offer, e.g.: • Tests. • Treatments. A belief that symptoms are the body's way of telling us to avoid activity.	• Summarise what has been done so far and what it means. • Offer clear explanations of what is and is not possible. • Challenge beliefs and expectations. • Use helpful and informative explanations of conditions rather than pathological explanations.
Not WILLING?	There may not be sufficient discrepancy between what is happening at the moment and what this particular individual *wishes* was happening in terms of their values and personal situation. There may be collusion or value in occupying the sick role.	• Try exploring this and extrapolating to the future: "Is life just as you would like it or are their things you would like to change?" • Try facilitating a discussion that imagines different futures. • Gentle confrontation may be needed.
Not ABLE?	Lack of 'general efficacy', i.e. a belief that change won't help or make a difference. Lack of 'self-efficacy' or self-belief/confidence.	• This involves sharing knowledge and information about why change will help in their specific situation. • Try considering other times where they have been successful in achieving goals. • Break the goals down into small, manageable tasks: "What is the smallest thing you can do to get you a little nearer to where you want to be?".

6. Promoting and supporting self-management

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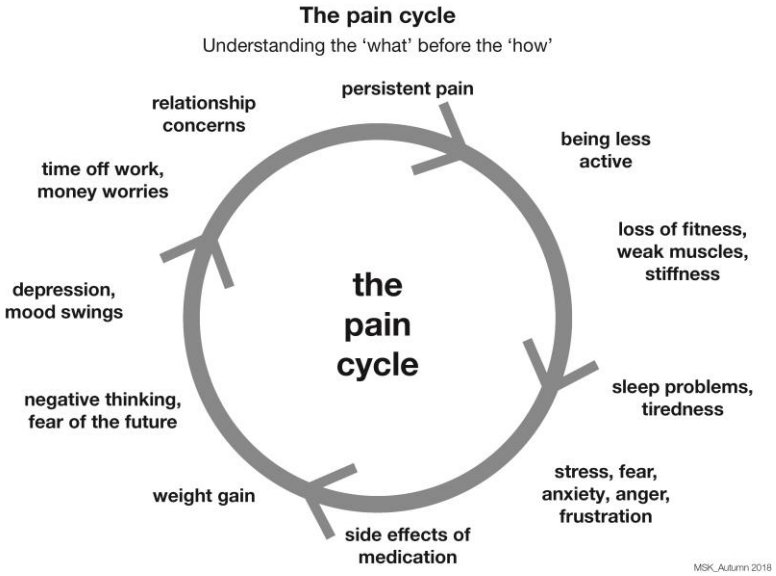
Self-care: where to start?

Ideas, suggestions and goals made ***by the person with the long-term condition*** are much more likely to be effective than things we 'tell them to do' or our 'advice'.
You may find these resources from Live Well With Pain helpful to support idea generation (they are available as a PDF along with a guide to each of the 10 footsteps):
https://livewellwithpain.co.uk/wp-content/uploads/10-footsteps-v2.pdf
You can ask people to identify their main concerns in the 'pain cycle' and then explore which of the behaviours from the 'self-care cycle' they are ready to explore. We identify useful resources to support these steps on the next page.



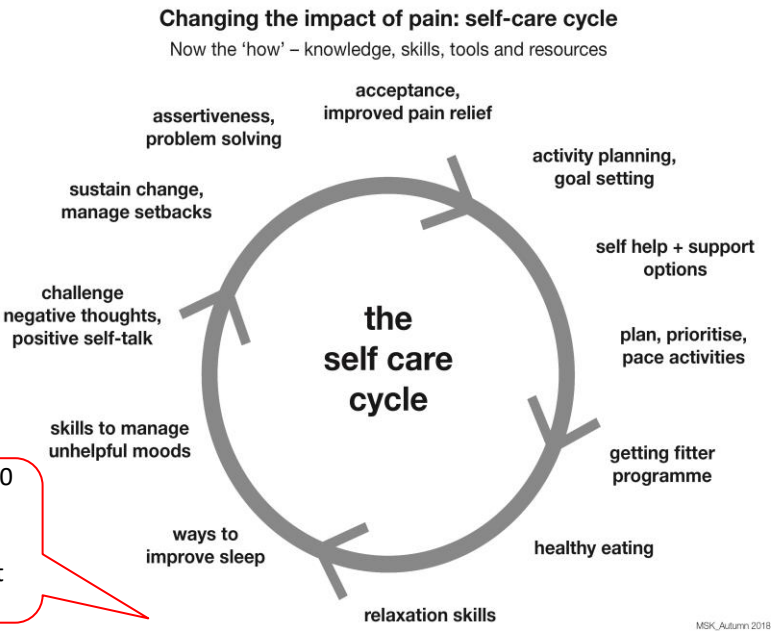
Pain can affect many aspects of life. Have a look at this pain cycle. Do any of these issues stand out as particularly difficult for you at the moment?

Have a look at this – what particularly matters to you at the moment?

Most people with pain have tried different things in the past. What has helped you and what hasn't?

This self-care cycle suggests some different areas we could look at to support you in managing your pain. Have a look. Does anything stand out as something you feel ready to explore?

How confident on a scale of 1 to 10 do you feel in making a small change in this area? What resources do you have to support you?



7. Promoting and supporting self-management: useful resources

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Area of need identified	Resources that may be helpful
Build knowledge about condition, e.g. osteoarthritis, persistent pain	Excellent information leaflets covering all MSK conditions can be found here: https://www.versusarthritis.org/about-arthritis/conditions/ For patients with osteoarthritis, Keele has an excellent self-management resource: https://jigsaw-e.com/patient-focus/guidebook For great accessible explanations of chronic pain, look here: https://livewellwithpain.co.uk/resources/resources-for-patients/explaining-pain-booklet/ Symptom and wellbeing tracker (designed for age 13–25y but could be transferable to all!): https://www.versusarthritis.org/about-arthritis/young-people/arthritis-tracker/
Managing fatigue and pacing	Versus Arthritis' helpful leaflet on managing fatigue: https://www.versusarthritis.org/about-arthritis/managing-symptoms/managing-fatigue/ Live Well With Pain: https://livewellwithpain.co.uk/resources/resources-for-patients/pacing-a-really-useful-skill-for-people-with-pain/
Getting fit and staying active	Starting a conversation and building activation around physical activity and exercise – a fantastic one-stop resource (including activity advice for those recovering from COVID): https://movingmedicine.ac.uk Free access to home exercise programmes: https://www.nhs.uk/conditions/nhs-fitness-studio/ Specific rehabilitation programmes for knee and hip osteoarthritis: https://escape-pain.org
Sleep well more often	Improving sleep quality can have a big impact on pain. This leaflet covers the bases of sleep hygiene, etc., for patients with MSK problems: https://www.versusarthritis.org/about-arthritis/managing-symptoms/sleep/ Remember that access to CBT-I may be available through IAPT. In some areas, CCGs have commissioned access to evidence-based commercial apps, e.g. Sleepio: https://www.nhs.uk/apps-library/sleepio/
Managing relationships	Having a supportive community and access to advice and support from other people with the same condition is helpful to some people with MSK pain. The VA community can be found here: https://community.versusarthritis.org
Managing work	Information about getting support at work, benefits and disability rights can be found here: https://www.versusarthritis.org/about-arthritis/living-with-arthritis/work/ The Versus Arthritis helpline may also be useful for those having difficulties: 0800 5200 520
Relaxation and mindfulness	A book and app-based resource: *Mindfulness: Finding Peace in a Frantic World* by Mark Williams and Danny Penman (available as a book and CD, an app or at this link): http://franticworld.com Headspace: techniques can be learned and repeated freely, or extended with a subscription: https://www.headspace.com
Managing pain	Versus Arthritis has a range of leaflets and videos of exercises to manage pain: https://www.versusarthritis.org/about-arthritis/managing-symptoms/exercise/exercises-to-manage-pain/ Condition-specific pain management resources from the Chartered Society of Physiotherapists can be found here: https://www.csp.org.uk/conditions/managing-pain-home