

**North Tyneside Joint Strategic  
Needs Assessment  
Musculoskeletal Conditions**  
February 2024



North  
Tyneside  
Council

# 1. Introduction

Musculoskeletal (MSK) conditions are those that affect bones, muscles, joints, and the spine. Whilst relatively few people die from them, they impact considerably individuals and the population. Over 80% of people with a MSK condition report chronic pain<sup>1</sup> and these conditions impact considerably on someone's quality of life. MSK conditions are the single largest cause of years lived with a disability, and a considerable number of people locally and nationally are out of work because of their condition.

There are over 200 separate MSK conditions, the most common include:

- Conditions of MSK pain (e.g., osteoarthritis, back pain, neck pain)
- Inflammatory conditions (e.g., rheumatoid arthritis)
- Osteoporosis and fragility fractures e.g., a fracture after a fall from a standing height

MSK conditions affect over 17 million people in England (around a third of the population)<sup>2</sup> and modelling suggests that over 63,000 residents in North Tyneside are affected<sup>3</sup>. People in North Tyneside are more likely to have a MSK condition than people in England overall and there are inequalities in who is affected.

## 2. Key issues

MSK conditions are not experienced equally across the population, leading to inequalities. There are differences by age, gender, ethnicity, and deprivation. There are also factors that make someone more susceptible to a MSK condition and other chronic diseases e.g., being overweight, lack of physical inactivity, smoking, and a diet deficient in vitamin D or calcium. These risk factors also affect some groups disproportionately.

As well as causing pain and disability, MSK conditions can impact on the quality of life of people affected by them. These conditions can affect a person's ability to work, sleep and carry out the normal everyday tasks they enjoy. Data for 2016/17 shows that the average health related quality of life score for adults in England who reported a long-term MSK problem was lower than people with no long-term conditions or other long-term conditions<sup>4</sup>.

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<sup>1</sup> **Public Health England (2020)**. Chronic Pain in Adults 2017. Available [online](#) [accessed 8 January 2024]

<sup>2</sup> **Versus Arthritis (2023)** The State of Musculoskeletal Health, 2023. Available [online](#) [accessed 4 January 2024]

<sup>3</sup> **Versus Arthritis**. Musculoskeletal Calculator. Available [online](#) [accessed 4 January 2024]

<sup>4</sup> *Average health related quality of life score for adults with a long-term MSK problem 2016/17: North Tyneside = 0.586, England = 0.549. Average health related quality of life score for adults with no long-term conditions in England in the same period = 0.91 (source, OHID)*

Access to good quality work is beneficial to health, but being in poor health can impact on a person's access to work. Poor MSK health can be a barrier to someone participating in the workplace and lead to inequalities. Published data suggests<sup>5,6,7</sup>:

- People with MSK conditions are less likely to be in employment (62% vs 81% of those with no long-term conditions). In real terms, this means that almost 2 million people are out of work (unemployed or economically inactive) due to a long-term health condition where the main issue is MSK.
- MSK conditions are the second most common cause of sickness absence behind minor illnesses (e.g., coughs and colds). In 2022 there were 23.4 million days lost to sickness absence due to MSK conditions. There are also inequalities in MSK sickness rates by gender and the type of work someone does.

There are also considerable direct and indirect costs associated with MSK conditions:

- Direct costs - People with MSK conditions can be frequent users of healthcare, leading to the third largest area of NHS spend. This is an estimated £5 billion a year (based 2014 modelling, so may be an under-estimate). There were almost 30 million prescriptions dispensed for MSK conditions in 2020, costing over £170 million. The annual costs of hip fractures alone are estimated to be over £2 billion (health and social care costs are combined), and this includes over 4 million hospital bed days.
- Indirect costs - It is estimated that the wider annual costs from MSK conditions are around £100 billion (e.g. social care costs, lost productivity, and sickness absence).

Good MSK health is a key feature of healthy ageing. However, the prevalence of MSK conditions is likely to increase as our population ages and the percentage of people experiencing some of the key risk factors also increases. This means that preventing MSK conditions and reducing the impact will become even more important to prevent a further increase of the burden of these conditions.

### 3. High level priorities

Much of the current approach to MSK health focuses on treating people when symptoms are severe. A public health approach could help residents and professionals think differently to reduce the risk of developing MSK conditions and reduce the impact if they do occur. This could include preventative activities to promote lifelong healthy bones, muscles and joints, and healthier lifestyles more generally.

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<sup>5</sup> **OHID (2023)**. Fingertips. Musculoskeletal health: local profiles Available [online](#) [accessed 21 January 2024]

<sup>6</sup> **Office for National Statistics (2023)**. Sickness absence in the UK labour market: 2022. Available [online](#) [accessed 3 January 2024]

<sup>7</sup> *Caution should be applied when analysing sickness data from 2020 to 2021 due to the impact of the COVID-19 pandemic e.g., furlough, home working and changes to sickness policies.*

Several people mistakenly believe that physical activity will make MSK conditions worse. There is work planned in 2024 to develop a North Tyneside Physical Activity strategy, and people with MSK conditions should be a priority area for this. As well as focusing on the role that physical activity plays in primary prevention, this could incorporate some of the work undertaken by Arthritis Research/Versus Arthritis to maximise secondary prevention opportunities and increase self-efficacy for people with MSK conditions. Joint and back pain should not be seen as a barrier to participating in physical activity programmes.

Work should also be undertaken to ensure that MSK health features appropriately in programmes commissioned by North Tyneside Council Public Health. These programmes should emphasise the benefits of physical activity, weight management and smoking cessation to people with MSK conditions. The importance of adequate nutrition to support bone health should also be emphasised.

There is an ongoing multi-agency programme of work taking place in the North of Tyne sub-region on work and health. This should continue to maintain a focus on MSK issues, given their broad impact.

#### 4. Those at risk

Whilst there is a common misconception that conditions such as back pain and arthritis are unavoidable, there are some factors that increase the risk for individuals and populations. Figure 1 below summarises some of the main contributory factors for key MSK conditions and Figure 2 provides more detail by risk factor.

Figure 1 – Factors contributing to MSK health (source, Versus Arthritis<sup>8</sup>)

MSK pain conditions (e.g. osteoarthritis)	Osteoporosis and associated fractures	Inflammatory conditions (e.g. rheumatoid arthritis)
Age (late 40s onwards), gender (more common in women), genetic factors, obesity, low levels of physical activity, physical injury, previous joint issues	Age (risk increases with age), genetic factors, gender (women more likely to be affected by hip fractures), inflammatory disorders, smoking, alcohol, poor nutrition, low levels of physical activity	Genetic factors, smoking, obesity.  Can affect any age

<sup>8</sup> Versus Arthritis (2014) Musculoskeletal Health – A public health approach. Available [online](#) [accessed 3 January 2024]

Figure 2 – Impact of risk factors on MSK conditions

Contributory factor	Impact on MSK conditions
Deprivation	People from the most deprived areas in England are more likely to report long-term MSK problems than those from the least deprived areas. People living in more deprived areas also report experiencing more severe pain <sup>9</sup> . There are higher rates of hip fractures in more deprived wards in North Tyneside (see Appendix 1)
Ethnicity	In England, people from some ethnic groups were most likely to report a long-term MSK problem in 2022 (e.g., White Gypsy or Irish Traveller, White Irish, White British, Black Caribbean), whereas people in other ethnic groups were less likely (e.g. Chinese, Bangladeshi, Black African). There is insufficient local data to understand this at a local level.
Obesity	Maintaining a healthy weight across the life course can reduce the risk of developing MSK conditions such back pain and knee/hip osteoarthritis. Weight loss at every stage of life reduces the risk of developing osteoarthritis and can reduce the associated pain and disability, even when damage to joints is irreversible. Nationally, 64% of the population are overweight or obese, but this rises to 69% of those with a long-term MSK condition <sup>2</sup> . More adults are classified as obese in North Tyneside than England overall (35.8% vs 25.9%) <sup>5</sup>
Physical inactivity	Maintaining physical activity levels across the life course can reduce the risk of developing MSK conditions. Nationally, 27% of the population are physically inactive, but this increases to 38% of people with long-term MSK conditions. Adults in North Tyneside are less likely to be physically active than adults in England overall (64.0% vs 67.3% in 2021/22) and more likely to be physically inactive (26.8% vs 22.3% in the same period).
Smoking	Smoking increases the risk and impact of MSK conditions. For example, smokers experience higher levels of pain and smoking is associated with an increased risk of fractures and slower healing, and particular risks for postmenopausal women <sup>10</sup> . Smoking also reduces the impact of treatment for rheumatoid arthritis and is a significant cause of the condition. The prevalence of smoking is decreasing locally and nationally. In 2022, 11.2% of adults were current smokers <sup>11</sup> , but there is variation in this and people in more deprived areas, those in routine and manual jobs and people with a severe mental illness are more likely to smoke.
Mental health conditions	Living with a chronic pain and disability from a MSK condition can impact on mental health. However, the body's pain system is complex, and conditions such as depression can also increase the risk of developing back pain etc. and make that pain worse. The association between MSK conditions and mental health is thought to be stronger in people in more deprived areas, leading to further inequalities. In 2021/22 14.3% of the population of North Tyneside had a diagnosis of depression recorded on their GP record, which is higher than the 12.7% in England <sup>12</sup> . In the same period, 0.95% of people in North Tyneside had a recorded diagnosis of severe mental illness, which is similar to the England value.

<sup>9</sup> **Versus Arthritis (2021)**. Chronic pain in England. Unseen. Unequal. Unfair. Available [online](#). [accessed 8 January 2024]

<sup>10</sup> **OHID (2022)**. Musculoskeletal health: Applying all our health. Available [online](#) [accessed 3 January 2024]

<sup>11</sup> **OHID (2023)**. Fingertips: Local Tobacco Control Profile. Available [online](#) [accessed 5 February 2024]

<sup>12</sup> **OHID (2022)** Fingertips: Common Mental Health Disorders. Available [online](#) [accessed 21 February 2024]

## 5. Level of need

### 5.1 Estimated prevalence of MSK conditions

Nationally, 20% of the population people in the UK see a doctor about a MSK problem each year<sup>13</sup>. Whilst this figure is not available at a local level, other published indicators suggest that **people in North Tyneside are more likely to have a MSK condition than people in England overall**, but less likely than many other areas in the North East.

- Modelling suggests **over 63,000** residents are living with a MSK condition<sup>3</sup>
- Information from GP records suggests that **20.7–21.2%** of the population reported a long-term MSK condition in 2023<sup>14</sup>

Appendix 1 of this document provides more detail.

### 5.2 Co-occurring conditions

People with MSK conditions may also be affected by other co-occurring/comorbid conditions. Many long-term conditions share similar risk factors and therefore people already facing inequalities are more likely to be affected. People in North Tyneside are more likely to report co-occurring conditions with MSK conditions than people in England overall (15.8% in 2023 vs 13.4% for England<sup>5</sup>). Whilst this is slightly higher than the previous year, it is one of the lowest in the North East.

People with MSK conditions are more likely to have a mental health condition. Living with a MSK condition can lead to depression and anxiety, and conversely poor mental health can exacerbate or potentially lead to a MSK condition. The most recent data shows that around a quarter of North Tyneside residents with a MSK condition also report depression or anxiety. The data also shows that the odds of this are similar for North Tyneside residents and people in England overall<sup>5</sup>.

### 5.3 Burden of MSK conditions

The 'burden' of a particular health issue can be qualified by the number of years lived with a disability (YLDs) it causes in a defined population. Over 21% of all years lived with a disability (YLDs) in England are due to a MSK condition<sup>15</sup>. Locally, MSK conditions were responsible for just under 21% of YLDs in North Tyneside. Whilst this is slightly lower than England overall, over 6,700 years were still lost to disability in 2019, which is considerable. Back pain was the leading cause, followed by neck pain, osteoarthritis, other MSK conditions and rheumatoid arthritis.

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<sup>13</sup> **OHID (2022)**. Musculoskeletal health: Applying all our health. Available [online](#) [accessed 3 January 2024]

<sup>14</sup> *OHID produce both the Fingertips MSK profile and the National General Practice Profiles, both of which have slightly different values due to the way they are calculated.*

<sup>15</sup> **Institute for Health Metrics and Evaluation (2019)** GBD Compare Visualization. Available [online](#) [accessed 4 January]

As above, people with long-term MSK conditions are more likely other long-term conditions than the general population. This places a further burden on the health and quality of life of those affected and potentially further burdens on the health and social care system.

## **6. Unmet needs**

It is difficult to quantify the exact level of MSK need. There appears to be a gap between the estimate of over 63,000 residents living with MSK conditions with the numbers of residents accessing healthcare (see section 8). This suggests that some people are either not seeking help and self-managing their condition, or have their needs met by accessing healthcare from a private provider e.g. physiotherapists and osteopaths (data is not readily available regarding this). This potential under-representation means that some conditions are hidden, and/or needs are unmet.

It is possible that there is some unmet need because of people not understanding what support is available, rather than not being able to access it. For example, residents may not self-refer to NTIMS (see below) or workplace schemes if they are unaware of their existence. Also, there is unmet need in relation to several MSK risk factors e.g., only small numbers of people living with excess weight currently access weight management services or physical activity programmes.

## **7. Projected need and demand**

In previous years, data has shown an upward trend in the prevalence of conditions such as osteoporosis. The need and demand linked to MSK health is expected to continue to rise due to:

- Our ageing population
- Rising obesity levels
- Reduced levels of physical activity

This will not be offset by the projected declines in smoking.

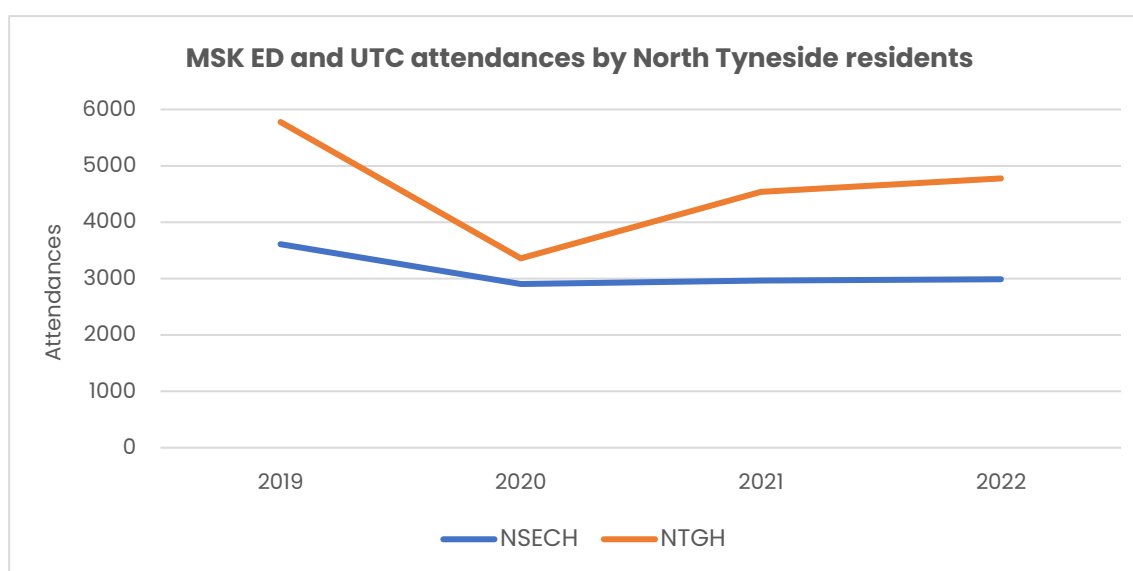
As above, three in ten working age people in the UK have a long-term health condition (including MSK conditions) and this is projected to rise to four in ten by 2040. These projections could mean that increasing numbers of people will struggle to work due to MSK conditions, which will further increase the burden on health and social care and the wider societal costs.

## 8. Community assets and services

Within North Tyneside, there are several services to support MSK health. Healthcare services can offer a combination of medication and non-drug-based treatments, but severe cases may need surgery.

In 2022 there were 7,763 attendances by North Tyneside residents at the Urgent Treatment Centre (UTC) at North Tyneside General Hospital (NTGH) in North Shields or Emergency Department (ED) at Northumbria Specialist Emergency Care Hospital (NSECH) where the presenting complaint or diagnosis code appears linked to MSK issues, with almost 62% of these at NTGH<sup>16</sup>. This is a slight increase on the previous year, but still lower than pre-pandemic levels, as shown in Figure 6 below. Overall, in 2022, more ED and UTC MSK attendances were for MSK pain and long-term conditions rather than injuries e.g. backpain, knee pain, sciatica, osteoarthritis. However, there were over 200 attendances due to a fractured neck of femur (e.g. broken hip).

Figure 6 – MSK attendances at NSECH ED and NTGH UTC, 2019–2022



The North Tyneside Integrated Musculoskeletal Service (NTIMS) is part of Northumbria Healthcare NHS Foundation Trust (NHCT) and offers a complete assessment and treatment service for MSK problems. Services are delivered from North Tyneside General Hospital and five clinics in the community. Residents can self-refer or be referred by primary care for treatment and assessment. Physiotherapists and specialist clinicians deliver a range of treatments, including group and solo sessions and surgery.

Current data held by commissioners suggests that demand for NTIMS is increasing, particularly with self-referrals. In the 12 months from October 2022 to October 2023

<sup>16</sup> Data provided by NENC ICB. North Tyneside residents may also travel to sites in Newcastle and elsewhere for urgent and emergency care. However, due to coding differences this data has not been accessed for this JSNA document.



there were over 25,000 new and review appointments delivered by the service. The most common reason for referral was knee pain, followed by lumbar spine issues, shoulder pain, hip pain and wrist/hand pain.

Data held by the service suggests that the rate of appointments in 2023 peaked for patients aged 60–69 and 70–79. Rates were higher in females than males for all age groups except 90+. There is no clear pattern by deprivation; there were higher rates in people from the 20% most deprived parts of the Borough compared to the 20% least deprived but the highest rates were people with postcodes in the 40–60% most deprived areas (e.g. those neither classed as most deprived or least deprived). Ward-level data suggests there were fewer appointments with people from wards with lower levels of deprivation.

The service and commissioners monitor various waiting targets. Despite increasing demand, there is a gradual improving trend with these indicators, even those not currently to target. Patient experience is monitored on a quarterly basis and is broadly positive. Negative feedback tends to focus on waiting times and other delays.

As above, severe MSK issues require surgery. According to the National Joint Registry<sup>17</sup> there were over 3,300 procedures carried out by NHCT to replace a joint, with over 3,000 of these for hip and knee replacements. Not all of these were carried out on North Tyneside residents, but over 630 procedures were carried out at North Tyneside General Hospital. In the same period, Newcastle upon Tyne Hospitals NHS Foundation Trust also carried out over 1,000 procedures and Newcastle Nuffield Hospital carried out over 900.

As above, there are also a range of other services in the Borough, such as private physiotherapists, acupuncturists, and support groups etc.

## **9. Evidence for interventions**

It is difficult to summarise the evidence for interventions for MSK conditions as the term covers such a range of conditions with multiple treatments and patients with very different needs to each other. There is a lot of research in the field, but we still need bigger and better designed studies to draw firm conclusions.

Over half of people with MSK conditions reported to Versus Arthritis<sup>2</sup> that they cannot do anything to lessen the impact of the condition on their lives. There are also steps that all residents can take throughout their life course to reduce the risk of developing these conditions. Physical activity can be beneficial for musculoskeletal health, despite many people with MSK conditions mistakenly believing that it can make their condition worse. Activities to strengthen bones and muscles can improve mobility,

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<sup>17</sup> **National Joint Registry (2024)**. StatsOnline – Hospital procedure volumes. Available [online](#). [accessed 8 January 2024]

reduce the risk of a fall and fractures, reduce pain and also improve mental wellbeing, which is important in people with co-occurring depression etc.

Other interventions that can help reduce the risk of developing MSK conditions include those that support people to maintain a healthy weight and to stop smoking (see relevant JSNA chapters).

The National Institute for Health and Care Excellence (NICE) produces evidence-based guidance, advice and clinical standards for healthcare professionals to aid decision-making in specific MSK conditions. More detail is provided in Appendix 2.

The Cochrane Library is a collection of databases that contain high quality, independent evidence to inform healthcare decision-making. In Cochrane Systematic reviews authors bring together all evidence that meets pre-specified eligibility criteria to answer a specific question. They also comment on the quality of available evidence. Appendix 2 summarises some recent Cochrane reviews into interventions for some common MSK conditions. In summary, whilst some studies showed some positive effects, at least in the short term, a lot of the evidence was not conclusive, or of low quality. Some drug-based treatments have short-term effects on pain and some exercise-based interventions appear better than doing nothing.

## 10. Views

No lived experience views or the wider views of residents were collected for the purpose of this JSNA topic.

## 11. Additional needs assessments required

Given the likely impact of an ageing population, it may be beneficial to carry out a full and systematic Health Needs Assessment into MSK conditions in North Tyneside. This should include a more detailed review of the evidence for intervention, further exploration of unmet need, the views of relevant stakeholders and an assessment of the quality of services provided to determine whether needs are adequately met or whether there are further opportunities.

## 12. Key Contacts

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## APPENDIX 1 – Additional data on prevalence and level of need

The table below shows the most recent published data for North Tyneside, the North East and England, and it shows that generally MSK health in North Tyneside is worse than England overall, but generally not worse than most other local authorities in the North East (apart from osteoporosis, where the rates were the joint highest in the region). However, some of these indicators have not been updated since 2012, as shown below.

Figure 7 – Prevalence of key MSK conditions in North Tyneside<sup>5,18</sup>

	North Tyneside	North East	England
Back pain prevalence, all ages, 2012	18.1%	18.0%	16.9%
Percentage with long term back problems, age 18+, 2016/17	10.2%	11.3%	9.4%
Percentage with arthritis or long-term joint problems, 2016/17	15.8%	16.0%	12.2%
Hip osteoarthritis prevalence, age 45+, 2012	10.9%	11.3%	10.9%
Knee osteoarthritis prevalence, age 45+, 2012	18.5%	19.2%	18.2%
Rheumatoid arthritis prevalence, age 16+, 2022/23	0.9%	0.9%	0.8%
Rate of hip fractures, age 65+, 2021/22	636 per 100,000	612 per 100,000	551 per 100,000
Prevalence of osteoporosis, age 50+, 2022/23	1.3%	0.9%	1.0%

Some indicators allow comparison within the Borough and therefore show differences in need. People registered with GP practices in North West Primary Care Network (PCN) were more likely to report a long-term MSK problem (“arthritis or ongoing problem with back or joints”) than Wallsend<sup>18</sup>, but there was large variation by practice too. The table below shows some of the known variation by condition.

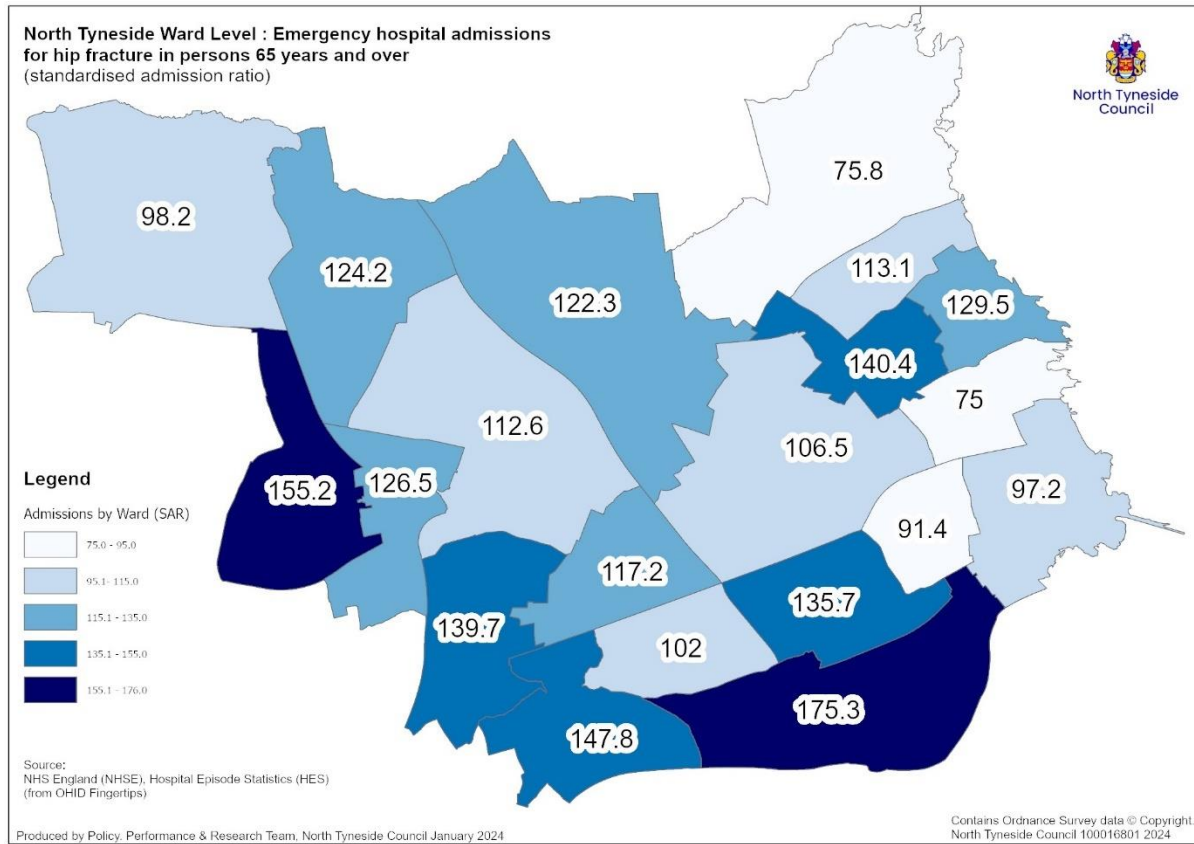
Figure 8 – Variation in MSK conditions within North Tyneside

MSK condition	Variation within North Tyneside
Back pain (2012)	In 2012 the prevalence was highest in Weetslade ward and lowest in Wallsend
Osteoporosis (2022/23)	In 2022/23 People registered with GP practices in Wallsend were more likely to have osteoporosis than people registered with practices in Whitley Bay. In fact, Wallsend Primary Care Network (PCN) had the 2 <sup>nd</sup> highest prevalence of osteoporosis of all PCNs in the North East and North Cumbria
Rheumatoid arthritis (2022/23)	Less variation at PCN-level, but some by GP practice. Prevalence lowest for patients registered at Beaumont Park Surgery and highest at Spring Terrace Health Centre. However, due to the small numbers involved there was a difference of less than 30 patients between the two practices.
Hip fractures (2016/17 to 2020/21)	From 2016/17 to 2020/21, people aged 65+ were more likely to have an emergency admission for a hip fracture in North Tyneside than England overall. However, admission rates were lower in some wards than England. Rates were lowest in Cullercoats and highest in Riverside ward. Figure 5 below shows this in more detail, where values over 100 represent higher admission ratios than England

<sup>18</sup> OHID (2024). National General Practice Profiles. Available [online](#) [accessed 9 January 2024]

The map below shows the variation in hospital admissions across North Tyneside from 2016 to 2021<sup>5</sup>

**Figure 9 – comparison of hip fracture admission ratios ward, 2016–2021**



## APPENDIX 2 – MSK interventions: evidence base

### Summary of relevant NICE guidance and standards

Resource	Key details
NG226 (2022)- Osteoarthritis in over 16s. Diagnosis and management <sup>19</sup>	<p>Arthritis should be diagnosed clinically (i.e. does not usually need imaging to confirm the diagnosis) and management should be guided by symptoms and physical function.</p> <p>The core treatments are regular and consistent therapeutic exercise and weight management (if appropriate) with information and support.</p> <p>Manual therapy should only be considered in certain conditions. Acupuncture, dry needling and electrotherapy should not be offered.</p> <p>Pharmacological management should be used if needed alongside non-drug treatments, and at the lowest effective dose for the shortest possible time. Examples include topical non-steroidal anti-inflammatory drugs (NSAIDs) for knee and other joint osteoarthritis. Paracetamol and weak opioids should not be routinely offered unless certain criteria are met, and glucosamine and strong opioids should not be offered.</p> <p>Patients should only be referred for joint replacement if their joint symptoms substantially affect their quality of life and non-surgical management has been ineffective.</p>
NG100 (2020) – Rheumatoid arthritis in adults: management <sup>20</sup>	<p>Adults with rheumatoid arthritis should be supported by a multidisciplinary team.</p> <p>Patients with symptoms suggestive of rheumatoid arthritis should be referred for specialist opinion and specific diagnostic tests should be carried out (blood tests for rheumatoid factor and anti CCP antibodies, and x-rays of the hands and feet).</p> <p>Active rheumatoid arthritis should be treated with the aim of achieving a target of remission or low disease activity – this may include multiple drugs (known as cDMARDs, biological DMARDs and other drugs). Corticosteroids and NSAIDs can also be used to manage symptoms in flare-ups.</p> <p>Patients should also have access to specialist physiotherapy, podiatry and occupational therapy. Some patients may also need referral for specialist surgery (where criteria are met)</p>
NG59 (2020) – Low back pain and sciatica in over 16s: assessment and management <sup>21</sup>	<p>Think about alternative diagnoses when reviewing people with low back pain. Exclude specific causes e.g. cancer, infection, trauma, inflammatory disease.</p> <p>Consider using risk stratification at first point of contact for each new episode for low back pain. Offer less intensive support for people likely to improve quickly and have a good outcome (e.g. reassurance and guidance on self-management) and more intensive support for those with a risk of a poor outcome e.g. exercise programmes with or without manual therapy, using a psychological approach).</p> <p>Imaging should not be routinely offered in a non-specialist setting – it should only be considered if it is likely to change management.</p> <p>Non-invasive treatments include self-management, exercise programmes, manual therapies as part of a treatment package (manipulation, massage etc.), return to work programmes. Psychological therapy should be considered as part of a treatment package. Orthotics and acupuncture should not be offered. Traction and electrotherapies should not be used.</p> <p>Gabapentanoids, opioids, oral corticosteroids and benzodiazepines should not be offered for managing sciatica. Risk should be taken into account when prescribing NSAIDs. Weak opioids can be considered for low back pain if NSAIDs cannot be used or are ineffective but should not be used for chronic pain. Gabapentanoids, anti-epileptics and antidepressants should not be prescribed for low back pain.</p>

<sup>19</sup> NICE (2022) [Overview | Osteoarthritis in over 16s: diagnosis and management | Guidance | NICE](#) [accessed 26 January 2024].

<sup>20</sup> NICE (2020). [Overview | Rheumatoid arthritis in adults: management | Guidance | NICE](#) [accessed 26 January 2024]

<sup>21</sup> NICE (2020) [Overview | Low back pain and sciatica in over 16s: assessment and management | Guidance | NICE](#) [accessed 26 January 2024]

	Invasive treatments include radiofrequency denervation and epidurals where indicated. Spinal injections should not be offered. Spinal decompression should be considered but spinal fusion should only be used if part of a research trial. Disc replacement should not be routinely offered
NG157 (2020) – Joint replacement (primary): hip, knee, shoulder <sup>22</sup>	Shared decision making should be supported, including offering alternatives to joint replacement, discussing the risks and benefits and a choice of analgesia and anaesthesia. Preoperative rehabilitation and outpatient rehabilitation should be used The guidance contains detailed information on specific procedures and surgical approaches
CG124 (2023) – Hip fracture management <sup>23</sup>	Surgery should be performed on the day of or day after admission. Correctable comorbidities should be identified and treated so that surgery is not delayed. Appropriate pain relief should be given e.g. paracetamol, opioids and nerve blocks. NSAIDs should not be used. The type of hip replacement used should depend on the type of fracture and the aim is to allow people to fully weight bear in the immediate post-operative period. Multi-disciplinary management should be used in the rehabilitation period including early supported discharge where appropriate.

## Summary of recent studies in the Cochrane Library relating to interventions for common MSK conditions

Topic	Date of review	Findings.
Exercise therapy for treatment of acute non-specific low back pain <sup>24</sup>	2023 (23 studies)	Exercise therapy may be no better than placebo treatment for pain relief in the short term (the exercise group had 1% less pain than the placebo group). Exercise therapy may be no better than placebo for improving functional status in the short term. Exercise therapy may also be no better than no treatment for pain relief and function, but this should be interpreted with caution. The authors had very little confidence in the evidence as studies were poorly designed and included few people.
Physical activity and education about physical activity for chronic musculoskeletal pain in children and adolescents <sup>25</sup>	2023 (4 studies)	The authors were unable to confidently state whether interventions based on physical activity and education are more effective than usual care for children and adolescents with chronic musculoskeletal pain. There was low certainty evidence that it may lead to improvements in children and adolescents with juvenile idiopathic arthritis
Pharmacological treatments for low back pain in adults: an overview of Cochrane Reviews <sup>26</sup>	2023 (seven reviews, 103 studies)	NSAIDs and muscle relaxants may reduce acute pain in the short term, but muscle relaxants may be associated with unwanted effects. Paracetamol had no effect on pain and no reviews looked at opioids. Opioids may reduce pain in the short term for chronic pain but may be associated with unwanted effects. NSAIDs may reduce chronic pain in the intermediate term. No review looked at paracetamol for chronic low back pain. The authors had reduced confidence in the quality of the evidence overall, but moderate confidence for some drugs on some types of pain.

<sup>22</sup> **NICE (2020)** – [Overview | Joint replacement \(primary\): hip, knee and shoulder | Guidance | NICE](#)

<sup>23</sup> **NICE (2023)** [Overview | Hip fracture: management | Guidance | NICE](#)

<sup>24</sup> **IJzelenberg et al (2023)**. Exercise therapy for treatment of acute non-specific low back pain. Cochrane Database of Systematic Reviews 2023. Issue 8. [accessed 26 January 2024]

<sup>25</sup> **Nascimento et al (2023)**. Physical activity and education about physical activity for chronic musculoskeletal pain in children and adolescents. Cochrane Database of Systematic Reviews 2023. Issue 7, [accessed 26 January 2024]

<sup>26</sup> **Cashin et al (2023)**. Pharmacological treatments for low back pain in adults: an overview of Cochrane Reviews. Cochrane Database of Systematic Reviews 2023. Issue 4, [accessed 26 January 2024]

Yoga for chronic non-specific low back pain <sup>27</sup>	2022 (21 studies)	Doing yoga for 3 months is probably better than not doing exercise, although improvements are small. There is probably little difference between yoga and other back-related exercise for back-related function at 3 months. The authors found the quality of evidence to be low to moderate.
Systemic corticosteroids for radicular and non-radicular lower back pain <sup>28</sup>	2022 (13 studies)	Corticosteroids appear to slightly reduce pain in the short term and allow resumption of normal activities in radicular lower back pain. They may also slightly improve people's abilities to perform normal activities at long term. They probably do not reduce the likelihood of undergoing surgery to remove a slipped/bulging disc and had no impact on quality of life. For other types of low back pain, the effects of systemic corticosteroids were unclear or suggested no benefits.
Arthroscopic surgery for degenerative knee disease <sup>29</sup>	2022 (16 studies)	Arthroscopic surgery provides little or no clinically important benefit in pain or function and probably does not provide clinically important benefits in knee-specific quality of life compared with a placebo procedure.
Exercise therapy for chronic low back pain <sup>30</sup>	2021 (249 studies)	Exercise probably reduces pain compared to no treatment in people with long-lasting back pain
Multidisciplinary rehabilitation for older people with hip fractures <sup>31</sup>	2021 (28 studies)	Multidisciplinary rehabilitation after surgery compared to usual care in hospital probably results in fewer cases of 'poor outcome' at 6-12 months and may reduce the risk of death and poorer mobility. The evidence is not clear on quality of life or differences with usual care at home.
Acupuncture for chronic nonspecific low back pain <sup>32</sup>	2020 (33 studies)	Compared with placebo, acupuncture may not be more effective at reducing pain immediately after treatment. It may not improve quality of life. However, acupuncture was better than no treatment for pain relief and functional improvement immediately after treatment
Non-steroidal anti-inflammatory drugs for acute low back pain <sup>33</sup>	2020 (32 studies)	Update on previous review (that found a small but significant effect in favour of NSAIDs for short term relief of back pain). NSAIDs seemed slightly more effective than placebo for short-term pain reduction. Also, slightly more effective than placebo for reducing disability in acute low back pain
Paracetamol versus placebo for knee and hip osteoarthritis <sup>34</sup>	2019 (10 studies)	Paracetamol provides minimal improvements in pain and function for people with hip or knee osteoarthritis. Current clinical guidelines consistently recommend paracetamol as the first line analgesic medication for hip or knee osteoarthritis. The authors argue that their results call for reconsideration of these recommendations
Surgical interventions for symptomatic mild to	2019 (5 studies)	There was low quality evidence that there may be little difference between arthroscopic partial meniscectomy and a home exercise

<sup>27</sup> **Wieland et al (2022)**. Yoga for chronic non-specific low back pain. Cochrane Database of Systematic Reviews 2022. Issue 11. [accessed 26 January 2024]

<sup>28</sup> **Chou et al (2022)**. Systemic corticosteroids for radicular and non-radicular low back pain. Cochrane Database of Systematic Reviews 2022. Issue 10. [accessed 26 January 2024]

<sup>29</sup> **O'Connor et al (2022)**. Arthroscopic surgery for degenerative knee disease. Cochrane Database of Systematic Reviews 2022. Issue 3. [accessed 26 January 2024]

<sup>30</sup> **Hayden et al (2021)**. Exercise therapy for chronic low back pain. Cochrane Database of Systematic Reviews 2021. Issue 9. [accessed 26 January 2024]

<sup>31</sup> **Handoll et al (2021)**. Multidisciplinary rehabilitation for older people with hip fractures. Cochrane Database of Systematic Reviews 2021. Issue 11. [accessed 26 January 2024]

<sup>32</sup> **Furlan et al (2020)**. Acupuncture for chronic nonspecific low back pain. Cochrane Database of Systematic Reviews 2020. Issue 12. [accessed 26 January 2024]

<sup>33</sup> **Van der Gagg et al (2020)**. Non-steroidal anti-inflammatory drugs for acute low back pain. Cochrane Database of Systematic Reviews 2020. Issue 4. [accessed 26 January 2024]

<sup>34</sup> **Leopoldino et al (2019)**. Paracetamol versus placebo for knee and hip osteoarthritis. Cochrane Database of Systematic Reviews 2019. Issue 2. [accessed 26 January 2024]

moderate knee osteoarthritis <sup>35</sup>		programme for the treatment of mild to moderate osteoarthritis. Similarly, surgery may not be better than other interventions to treat this condition
Multidisciplinary biopsychosocial rehabilitation for subacute low back pain <sup>36</sup>	2017 (9 studies)	Multidisciplinary treatment may be better than usual care. Individuals receiving multidisciplinary treatments had less pain, less disability and increased likelihood of return to work. However, they may be no better than other treatments.
Celecoxib for rheumatoid arthritis <sup>37</sup>	2017 (8 studies)	Celecoxib may improve RA symptoms and alleviate pain more than placebo, but probably provides little or no difference in physical function improvement
Aquatic exercise for the treatment of knee and hip osteoarthritis <sup>38</sup>	2016 (13 studies)	This is an update of a previous Cochrane Review. There is moderate quality evidence that aquatic exercise may have small, short term and clinically relevant effects on patient reported pain, disability and quality of life.
Non-steroidal anti-inflammatory drugs for sciatica <sup>39</sup>	2016 (10 studies)	NSAIDs are no more effective in reducing pain in sciatica than placebo or other drugs. NSAIDs are more effective in overall improvement compared to placebo or other drugs, but this finding should be interpreted with caution as the quality of trials is low.
Professional interventions for GPs on the management of musculoskeletal conditions <sup>40</sup>	2016 (30 studies)	There is good quality evidence that a GP alerting system with or without patient directed education on osteoporosis and reminders improves guideline consistent GP behaviour, resulting in better diagnosis and treatment rates.
Massage for low back pain <sup>41</sup>	2015 (25 studies)	Authors have very little confidence that massage is an effective treatment for low back pain. There were short term improvements in pain outcomes
Pilates for low back pain <sup>42</sup>	2015 (126 studies)	There is some evidence of the effectiveness of Pilates for low back pain but no conclusive evidence that it is superior to other forms of exercise. Pilates is probably more effective than minimal intervention in the short term and intermediate term for pain and disability outcomes. It is more effective than minimal intervention for improvement of function, but it is probably not more effective than other exercises for pain and disability.
Cognitive-behavioural treatment for subacute and chronic neck pain <sup>43</sup>	2015 (10 studies)	CBT was found to be statistically better than no treatment in chronic neck pain at improving pain, disability and quality of life, but these effects could not be considered clinically meaningful.

<sup>35</sup> **Palmer et al (2019)**. Surgical interventions for symptomatic mild to moderate knee osteoarthritis. Cochrane Database of Systematic Reviews 2019. Issue 7. [accessed 26 January 2024]

<sup>36</sup> **Marin et al (2017)**. Multidisciplinary biopsychosocial rehabilitation for subacute low back pain. Cochrane Database of Systematic Reviews 2017. Issue 6. [accessed 26 January 2024]

<sup>37</sup> **Fidahic et al (2017)**. Celecoxib for rheumatoid arthritis. Cochrane Database of Systematic Reviews 2017. Issue 6. [accessed 26 January 2024]

<sup>38</sup> **Bartels et al (2016)**. Aquatic exercise for the treatment of knee and hip osteoarthritis. Cochrane Database of Systematic Reviews 2016. Issue 3 [accessed 26 January 2024]

<sup>39</sup> **Rasmussen-Barr et al (2016)**. Non-steroidal anti-inflammatory drugs for sciatica. Cochrane Database of Systematic Reviews 2016. Issue 10. [accessed 26 January 2024]

<sup>40</sup> **Tzortziou Brown et al (2016)**. Professional interventions for GPs on the management of musculoskeletal conditions. Cochrane Database of Systematic Reviews 2015. Issue 5. [accessed 26 January 2024]

<sup>41</sup> **Furlan et al (2015)**. Massage for low back pain. Cochrane Database of Systematic Reviews 2015. Issue 9. [accessed 26 January 2024]

<sup>42</sup> **Yamato et al (2015)**. Pilates for low back pain. Cochrane Database of Systematic Reviews 2015. Issue 7. [accessed 26 January 2024]

<sup>43</sup> **Monticone et al (2015)**. CBT for subacute and chronic neck pain. Cochrane Database of Systematic Reviews 2015. Issue 5. [accessed 26 January 2024]



		For subacute neck pain, there was low quality evidence that CBT statistically significantly better than other types of interventions at improving pain, but this effect was not clinically relevant.
High intensity versus low intensity physical activity or exercise in people with hip or knee osteoarthritis <sup>44</sup>	2015 (6 studies)	The review compared low- and high-intensity exercise programmes with each other, not with no exercise or other interventions. There was low quality evidence of a small improvement in pain and function with of high-intensity compared to low-intensity programmes. However, this is unlikely to be of clinical importance. Authors are uncertain as to whether higher intensity programmes may have more harmful effects than those of lower intensity. There is a need for more studies.

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<sup>44</sup> **Regnaud et al (2015)**. High intensity versus low intensity physical activity exercise in people with hip or knee osteoarthritis. Cochrane Database of Systematic Reviews 2015. Issue 10. [accessed 26 January 2024]