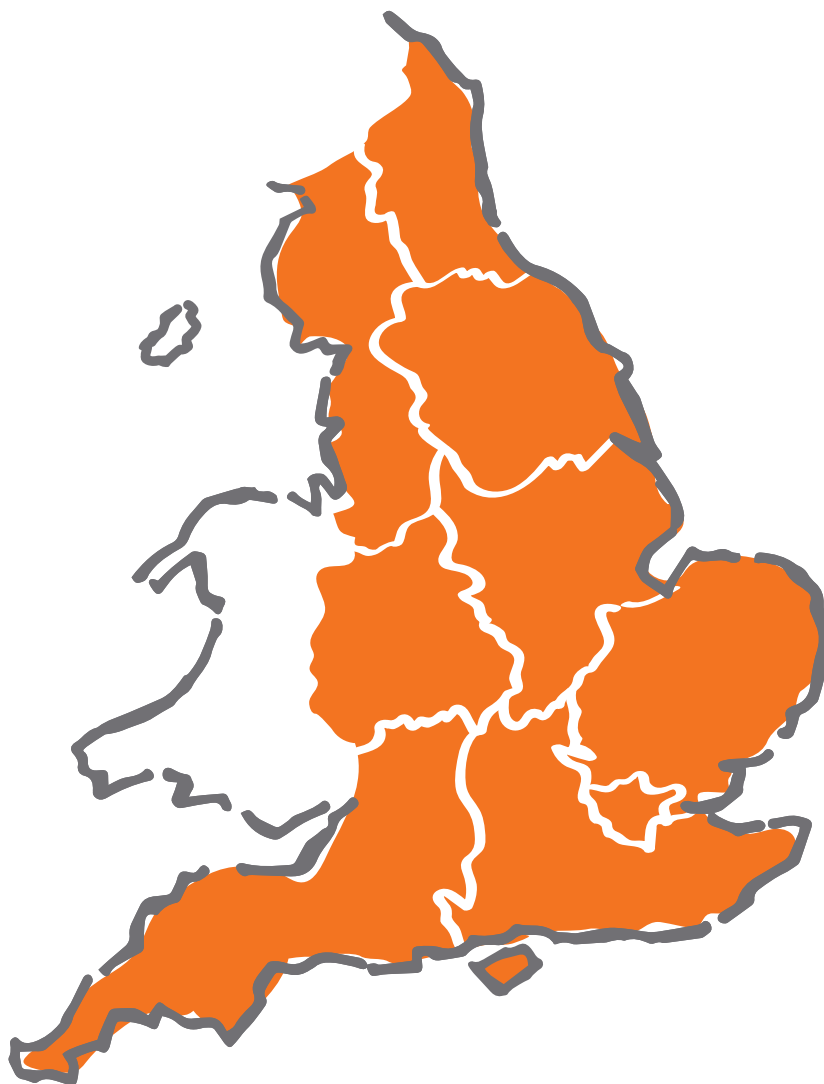


A FAIR ASSESSMENT?

Musculoskeletal conditions:
The need for local prioritisation



ARTHRITIS RESEARCH UK

Arthritis Research UK is the charity dedicated to stopping the devastating impact that arthritis has on people's lives. Everything that we do is focused on taking the pain away and keeping people active. Our remit covers all conditions which affect the joints, bones and muscles including osteoarthritis, rheumatoid arthritis, back pain and osteoporosis. We fund research into the cause, treatment and cure of arthritis, provide information on how to maintain healthy joints and bones and to live well with arthritis. We also champion the cause, influence policy change and work in partnership with others to achieve our aims. We depend on public support and the generosity of our donors to keep doing this vital work.

CONTENTS

1. Introduction	3
2. Executive Summary	5
3. A background to common characteristics	5
4. What we did	7
5. Why are musculoskeletal conditions of interest to local authorities?	8
6. Why should this report be of interest to local authorities?	9
7. The system	11
8. Results	12
9. Conclusion and recommendations	15
10. Appendix including methodology and data tables	19

1. INTRODUCTION

Arthritis and musculoskeletal conditions encompass a wide range of health conditions affecting bones, joints and muscles, pain syndromes and rarer conditions of the immune system. They are predominantly long term conditions and are characterised by pain, stiffness and limitation of movements. Musculoskeletal conditions such as osteoarthritis, back pain and fragility fractures owing to osteoporosis have a considerable impact on quality of life.

The pain caused by musculoskeletal conditions can have a devastating impact on people's lives. It is a widespread problem which affects every community: for knee osteoarthritis (the most common form of osteoarthritis) prevalence ranges from 15% to 21% of people across England.¹ Each year there are 89,000 hip fractures, at an annual cost of £2 billion.^{2,3} Back pain is a substantial cause of working days lost and its indirect economic costs to the UK are £10 billion.⁴

The wider national impact of musculoskeletal conditions has been known for some time. They represent the 4th largest NHS programme budget, and each year one in five of the general population consults a GP about a musculoskeletal problem.^{5,6} 30.6 million working days are lost each year owing to these conditions, with rheumatoid and osteoarthritis costing the economy £14.8 billion each year.^{7,8}

This is a problem which will only become more acute as we live longer as a population. An ageing population combined with growing levels of obesity and physical inactivity, will result in an increase in the number of people living with musculoskeletal conditions. Such an increase could lead to health and social care services becoming overwhelmed, unless early action is taken.

There is often a misunderstanding that '*nothing can be done*' if you have arthritis. There is, however, much that can be done to take a *public health* approach: increasing physical activity and keeping a healthy body weight can markedly reduce the risk of developing a musculoskeletal problem. A public health approach* can also reduce pain and increase mobility for those already living with the conditions, helping to mitigate the impact on their lives.

Prior to the Government's reform of the health and social care system in 2012, the system was geared towards a centrally directed approach to tackling these problems. Following the reforms, responsibility for public health now resides with Public Health England and *delivery* of a public health approach has been devolved to local authorities.

At the heart of devising and delivering this new responsibility are the two documents that local authorities have a statutory duty to produce: the Joint Strategic Needs Assessment (JSNA) and the Joint Health and Wellbeing Strategy (JHWS). It is from these two documents that the direction of local healthcare activities should flow, particularly in relation to public health.

The UK analysis of the Global Burden of Disease 2010 identifies musculoskeletal conditions as the largest contributor to the burden of disability in the UK – in 2010, such conditions accounted for 30.5% of all years lived with disability.⁹ When this data is considered alongside local authority prevalence figures for hip and knee osteoarthritis[†] the picture is clear: the prevalence of musculoskeletal conditions is such that all local authorities should include these conditions in their assessments.

We were concerned that this widespread prevalence is not reflected in these documents. We therefore examined every JSNA and JHWS for the number of mentions of musculoskeletal conditions alongside the context in which they are mentioned.

The results of this work are required reading for all councillors and public health officials. They demonstrate that whilst some local authorities are delivering quality assessments, many are failing to capture the health needs of people living in their community with musculoskeletal conditions. We hope that this report is the first step to changing that.

*A life course approach to musculoskeletal conditions is outlined in Arthritis Research UK's 'Musculoskeletal health: a public health approach'.
[†All figures are available at www.arthritisresearchuk.org/mskcalculator]



2. EXECUTIVE SUMMARY

2.1 Key findings

- » One in four local authorities (26%) have not included any mentions of arthritis, musculoskeletal conditions or osteoarthritis in their Joint Strategic Needs Assessment.
- » Only 36% (55) of local authorities mentioned osteoarthritis in their Joint Strategic Needs Assessment; only 38% (58) of local authorities included back pain.
- » 93% (142) of JSNAs and 57% (86) of JHWSs mention falls, fragility fractures, bone health and osteoporosis. Overall, musculoskeletal conditions were included in 95% (144) of JSNAs.
- » Only one local authority included osteoarthritis in their Joint Health and Wellbeing Strategy.
- » There was variation across the JSNAs and JHWSs examined, both from the perspective of number of mentions and their context.

2.2 Recommendations

- » Overview and Scrutiny Committees to conduct an investigation in local authorities that this report identifies as failing to accurately assess the needs of those in their area living with musculoskeletal conditions.
- » Local authorities should include data on major musculoskeletal conditions in their JSNA and JHWS, using data sources including the musculoskeletal bulletins produced jointly by Arthritis Research UK and Public Health England.
- » The Department of Communities and Local Government and the Department of Health should jointly host a national portal with up to date links to every JSNA and JHWS, to share learning between local people, national charities and local government.
- » For the National Audit Office, using its new responsibilities under the Local Audit and Accountability Act 2014, to assess the effectiveness of the JSNA/JHWS process in relation to long term conditions including musculoskeletal conditions, and in particular to determine whether this can be improved through the availability of increased guidance for local authorities in relation to these conditions.
- » Public Health England should act as a hub for the dissemination of best practice and data amongst local authorities, driving improvement in services for people with musculoskeletal conditions.

3. A BACKGROUND TO COMMON CHARACTERISTICS

Musculoskeletal conditions encompass a wide range of health conditions affecting bones, joints and muscles, pain syndromes and rarer conditions of the immune system. They are predominantly long term conditions and are characterised by pain, stiffness and limitation of movements. Symptoms and severity can vary greatly amongst different people, different joints and over time. Broadly, there are three main groups of musculoskeletal conditions – inflammatory conditions, conditions of musculoskeletal pain, and osteoporosis and fragility fractures[†].

Figure 1 explores each of these groups in greater detail.

[†]In this report we have focused on fractures that are due to an underlying musculoskeletal condition.

Figure 1: The common characteristics of musculoskeletal conditions

Group	1. Inflammatory conditions	2. Conditions of musculoskeletal pain	3. Osteoporosis and fragility fractures
Example	Rheumatoid arthritis.	Osteoarthritis, back pain.	Fracture after a fall from a standing height.
Age	Any.	More common with rising age.	Mainly affects older people.
Progression	Often rapid onset.	Gradual onset.	Osteoporosis is a gradual weakening of bone. Fragility fractures are sudden discrete events.
Prevalence	Common (e.g. around 400,000 adults in the UK have rheumatoid arthritis.)	Very common (e.g. 8.75 million people in the UK have sought treatment for osteoarthritis.)	Common (e.g. around 89,000 hip fragility fractures occur each year in the UK.)
Symptoms	Common musculoskeletal symptoms include pain, joint stiffness and limitation of movement. Symptoms often fluctuate in severity over time.		Osteoporosis itself is painless. Fragility fractures are painful and disabling.
Extent of disease	Can affect any part of the body including skin, eyes and internal organs.	Affects the joints, spine and pain system.	Hip, wrist and spinal bones are the most common sites of fractures.
Main treatment location	Urgent specialist treatment is needed, and usually provided in hospital outpatients.	Primary care for most people. Joint replacement requires hospital admission.	Primary care for prevention. Hospital for treatment of fractures.
Interventions	A range of drugs and support.	Physical activity, pain management. For severe cases joint replacement may be necessary.	Bone strengthening drugs and fracture liaison services reduce future fracture risk. Fractures may require surgery.
Modifiable risk factors	Smoking.	Injury, obesity, physical activity.	Smoking, alcohol intake, poor nutrition including insufficient vitamin D, physical activity.

4. WHAT WE DID

The research collated and analysed Joint Strategic Needs Assessments (JSNAs) and Joint Health and Wellbeing Strategies (JHWSs) for the 152 local authorities with a statutory duty to produce these documents.⁵ We specifically focused on these documents because local authorities, alongside their Clinical Commissioning Groups and through their Health and Wellbeing Board, have a statutory duty to produce them. There is also a clear expectation that such documents will be publicly available to ensure local transparency and accountability.

The research included supporting documents to JSNAs and JHWSs which were publicly available online.

The purpose of the research was two-fold: firstly, to understand if local authorities were routinely identifying and planning for the needs of people with musculoskeletal conditions in these documents. Secondly, for those musculoskeletal conditions which received the *most* mentions in each JSNA and JHWS, we looked at the context to identify the level of understanding of burden, risk factors and commitments to action.

The first part of the analysis was a quantitative assessment of the JSNAs and JHWSs. The number of references to musculoskeletal conditions within each JSNA and JHWS across England were recorded. These mentions were categorised and logged for each document across four categories:

1. Generic mentions of arthritis and musculoskeletal conditions/diseases;
2. Osteoarthritis;
3. Back/back pain;
4. Fragility fractures, bone health, osteoporosis, and falls owing to an underlying musculoskeletal condition

The second part of the research was an assessment of the context of the musculoskeletal mentions. Using the number of mentions of each category as a proxy for the prioritisation in any given JSNA, we examined the leading category/categories to understand the context across three aspects:

- » The burden of musculoskeletal conditions;
- » The awareness of the risk factors;
- » The local and national commitments to action.

This enabled us to identify whether a local authority was 'at the start' of their journey in planning for musculoskeletal conditions or whether the understanding in these documents was developed or advanced.

Please see the Appendix for the methods section, and detailed results.

⁵Throughout this document the term 'local authorities' is used to refer to those local authorities which have statutory responsibility for public health.

5. WHY ARE MUSCULOSKELETAL CONDITIONS OF INTEREST TO LOCAL AUTHORITIES?

5.1 Musculoskeletal conditions: the impact

Musculoskeletal conditions have a substantial impact on society, the health service and individuals.

Society: Affecting nearly 10 million people, the impact of musculoskeletal conditions on society is significant. 30.6 million working days lost are due to sickness absence caused by a musculoskeletal condition.¹⁰ The combined indirect cost of osteoarthritis and rheumatoid arthritis to the economy is estimated to be £14.8 billion and the indirect economic costs of back pain in the UK is £10 billion.^{11,12}

The impact of an ageing society is likely to have a profound impact on the numbers of people living with a musculoskeletal condition. The number of people aged over 65 with a musculoskeletal condition in England and Wales is predicted to increase by over 50% by 2030.¹³

The health service: In 2012 alone musculoskeletal conditions led to 86,000 hip replacements and 90,000 knee replacements.¹⁴ Each year 20% of the general population consults a GP about a musculoskeletal condition.¹⁵ There are 89,000 hip fractures each year in the UK,¹⁶ accounting for annual health and social care costs of around £2 billion.¹⁷

Individuals: Musculoskeletal conditions stop people from doing things that are so often taken for granted like going to work, playing with our children or grandchildren, or going out with friends.



6. WHY SHOULD THIS REPORT BE OF INTEREST TO LOCAL AUTHORITIES?

Musculoskeletal conditions have often not received the same level of policy attention or interest as other long term conditions. Barriers to prioritisation have included a lack of prevalence data, the complexity of these diseases and a mis-perception that 'nothing can be done'. Often, musculoskeletal conditions have been placed in the 'too difficult' box.¹⁸

This is unacceptable, because as the 2010 Global Burden of Disease demonstrates, musculoskeletal conditions are now the largest contributor to the burden of disability in the UK.¹⁹ The high prevalence of these conditions – which includes back pain, osteoarthritis and fragility fractures – is such, that irrespective of locality, musculoskeletal conditions will have a great impact on the health needs of local people. Nationally 1 in 5 people has osteoarthritis; 1 in 10 severe back pain; and each year 89,000 people will have a hip fracture.^{20,21}

As the main risk factors for developing a musculoskeletal condition are ageing, obesity and physical inactivity the number of people experiencing these conditions will only grow in number. This will result in an even greater burden being placed on health and social care.

One of the main symptoms of arthritis is pain. There has been a historic misconception that nothing can be done, and pain should be tolerated, because this is just part of 'getting older'. But the growing weight of evidence is clear: the pain of arthritis is not inevitable. There is much that can, and should, be done to ensure that people have good bones, muscles and joints throughout their lifetime.

A public health approach across the life-course has much merit for musculoskeletal conditions. From a primary prevention perspective, risk factors such as obesity are common to the development of many conditions, such as osteoarthritis and diabetes. From a secondary prevention perspective, ensuring a person with painful osteoarthritis exercises and maintains a healthy body weight, can reduce the impact of the disease. In the case of fragility fractures, there is also good evidence of what works well: a fracture liaison service linked to every hospital can help prevent further fractures.²²

Reform of the health system in 2012 devolved significant powers to local authorities in relation to public health. The significant economic impact of musculoskeletal conditions, coupled with financial constraints facing local authorities, means that there is a strong impetus to *include musculoskeletal conditions in health plans now, to save funds later*. Musculoskeletal conditions should be placed on an equal footing with other long term conditions. The pain of arthritis may not be visible, but the people who live with its pain should be recognised.

6.1 Working in partnership with Arthritis Research UK

This report contains details of the extent to which local authorities included musculoskeletal conditions in their Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies available in February – March 2014. Publishing the data enables people with an interest in public health – and the performance of their local authority – to understand the extent to which the burden of musculoskeletal conditions is included. You can see the full data tables in the accompanying document "A Fair Assessment: Data on the extent that local authorities prioritise musculoskeletal conditions." This can be seen at www.arthritisresearchuk/jsna.

Our decision to collect and publish the data on inclusion of musculoskeletal conditions in JSNAs and JHWSs was taken to enable local authorities to understand the extent to which the burden of musculoskeletal conditions on individuals, the health and social care services and society are being recognised and understood. It also enables comprehension by focusing on the evidence base. Arthritis Research UK is keen for this to be the beginning of a conversation about how we can work in partnership to develop the health and wellbeing of people with musculoskeletal conditions.

To facilitate such a discussion, Arthritis Research UK has worked with Public Health England to produce a range of briefings and tools which can be of use in this field. In part these are based on work that Arthritis Research UK has undertaken in partnership with Imperial College London to provide local prevalence estimates for four musculoskeletal conditions: hip and knee osteoarthritis, rheumatoid arthritis, back pain and fragility fractures. As the data becomes available we are sharing it with local authorities and others at

www.arthritisresearchuk.org/mskcalculator

To help public health practitioners and local authorities respond to the needs of people with, or at risk of, musculoskeletal conditions, Arthritis Research UK has also published a report focusing on *Musculoskeletal health: a public health approach*. This report details a life-course approach to musculoskeletal health and brings together the evidence on the relevant risk factors. This report will be of interest to those who wish to understand the key facets of a primary and secondary prevention approach to musculoskeletal conditions. Copies alongside other policy reports are available online at: **www.arthritisresearchuk.org/policyreports**

7. THE SYSTEM

7.1 Role of the Joint Strategic Needs Assessment and Joint Health and Wellbeing Strategy

Joint Strategic Needs Assessments (JSNAs)

Since April 2013, it has been the statutory duty of local authorities and Clinical Commissioning Groups to produce a JSNA. The core purpose of this document is to undertake ‘a comprehensive analysis of the current and future needs and assets of their area.’²³ This allows Health and Wellbeing Boards (HWBs) to investigate the range of resources available and consider wider factors that may be relevant in improving health and wellbeing outcomes.

The JSNA is specific to their local area in both content and design. As such, there is no structure, format or data set that is compulsory; however, both quantitative and qualitative evidence should be included and they should draw on existing tools. Local authorities do have ‘equal and joint duties’ to prepare their JSNAs via their Health and Wellbeing Boards.²⁴

People living with musculoskeletal conditions will have different needs, depending on the severity of the condition they have. JSNAs should accurately reflect the diverse nature of musculoskeletal conditions, and provide a comprehensive assessment of the burden placed on their local community by all musculoskeletal conditions.

Joint Health and Wellbeing Strategies (JHWSs)

JHWSs are designed to provide ‘a continuous process of strategic assessment and planning’ with a core aim of developing ‘local evidence-based priorities for commissioning which will improve the public’s health and reduce inequalities’.²⁵

JSNAs will outline the health needs of the local population. Using this as a starting point, JHWSs will move local authorities from ‘assessing needs and available assets to planning the delivery of integrated local services based upon those needs and assets, and collectively addressing the underlying determinants of health and wellbeing’.²⁶ The JHWS should look to address the needs identified in the JSNA. JHWSs are also expected to take into account the Government’s priorities for NHS England as outlined in the Mandate.²⁷

How the assessment of local health needs translates into the planning and commissioning cycle

Health and Wellbeing Boards aim to employ an outcomes-based approach. The health needs of the local population will influence priorities and these will be translated into outcomes. This outcomes based approach will influence services and inform local commissioning.²⁸

HWB membership is varied and therefore by design encourages consideration of priorities across health, social care and public health services to develop a shared set of priorities and outcomes for the area. The JSNA and the JHWS should flow seamlessly within the commissioning cycle to provide integrated, outcome-driven services. If a health need is identified at the beginning of the process it can have a ripple effect as a local priority across the commissioning cycle.

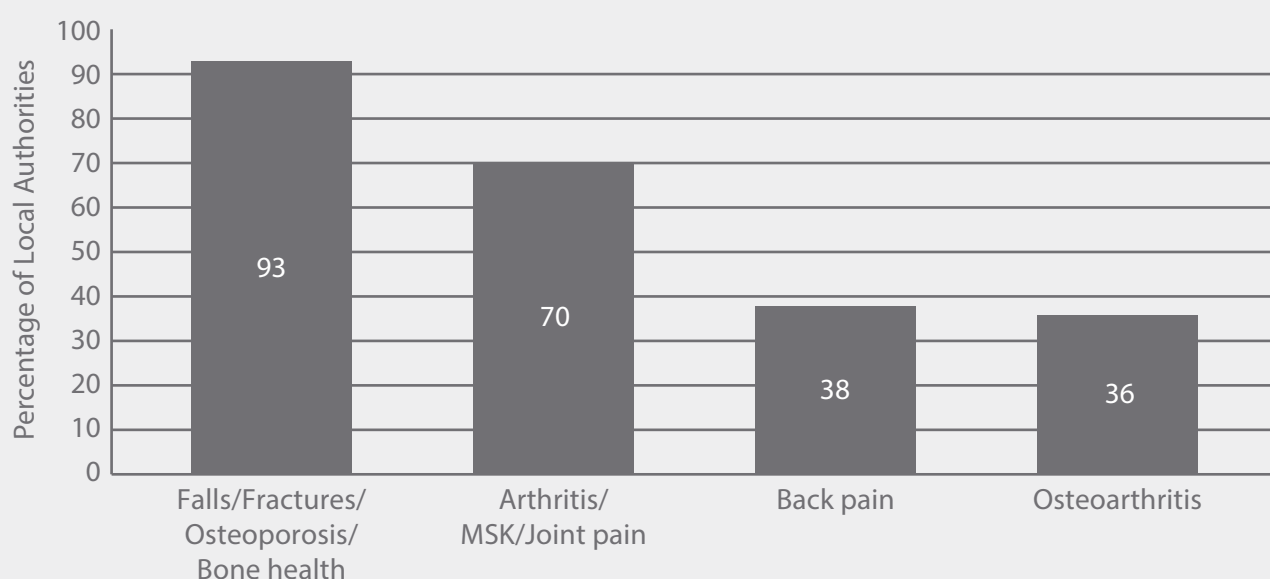
²³An ‘asset’ includes anything which could be utilised to improve outcomes and have an impact on the wider determinants of health.

8. RESULTS

8.1 Frequency of mention

Nearly all local authorities included musculoskeletal conditions in the JSNA to some extent. This was dominated by *falls, fragility fractures, bone health and osteoporosis* which featured in 142 (93%) of JSNAs. When general mentions of *musculoskeletal conditions* are combined with *osteoarthritis* in the analysis, it emerged that 26% (40) of local authorities did not include any mentions of arthritis.

Figure 2: Inclusion of musculoskeletal conditions by local authorities in JSNAs



Falls, fragility fractures, bone health and osteoporosis

Of the 142 local authorities that included these conditions, 27% (38) made frequent reference to these in their JSNA (over 50 mentions), suggesting a highly detailed consideration. In the JHWS, this category was mentioned by 57% (86) of local authorities. Almost three quarters (73%, 63) of those strategies which included this category did so fewer than five times ("basic"), with only one mentioning this over fifty times ("substantial").

General mentions of arthritis and musculoskeletal conditions

The second most common category was *arthritis and musculoskeletal conditions*, which appeared in 70% (106) of JSNAs. Of these, only four mentioned these conditions frequently (over 50 mentions) in their JSNA. In the JHWS, this category was mentioned by 15% (23) of local authorities, all fewer than five times ("basic").

Back pain

Only 38% (58) of local authorities included back pain in their JSNA. Of those JSNAs which did include back pain the majority (83%, 48) mentioned back pain fewer than 5 times ("basic"). In the JHWS, ten local authorities (7%) mentioned back pain, all fewer than five times ("basic").

Osteoarthritis

Osteoarthritis was mentioned in 36% (55) of JSNAs. Of these, the vast majority (93%, 51) of these mentioned it fewer than 5 times ("basic"). Only one local authority in England mentioned osteoarthritis in its JHWS.

Content analysis

A content analysis was carried out to understand more about how local authorities had handled musculoskeletal conditions. Selecting the musculoskeletal condition that was mentioned most frequently, reviewers rated JSNAs and JHWS by the degree to which they included an assessment of the burden, the associated risk factors for this condition and the commitment to action to address the health need.

Falls, fragility fractures, bone health and osteoporosis were the most common category in 127 JSNAs. Overall ratings were strong with 40% (51) of these being rated by reviewers as “developed” with 25% (32) awarded the highest rating of “advanced”. The second most commonly mentioned category was arthritis and musculoskeletal conditions which was the leading category in 16 JSNAs.^{††} The majority, 87.5% (14) were rated “at the start”.

In the JHWS content analysis, *falls, fragility fractures, bone health and osteoporosis* was again the most common category, leading in 60% (86) of JHWS reviewed. These were treated less comprehensively than in the JSNAs with 73% (63) of these assessed as being “at the start”, and only three thought to be “developed”. The leading categories in the remaining JHWS were *arthritis and musculoskeletal conditions* in 16 cases, and back pain in four.

Analysis

The high level of recognition of falls, fragility fractures and osteoporosis is welcomed. Fragility fractures have a substantial impact on people’s lives, in particular those of older people. There are 89,000 hip fractures each year and 14,000 people each year die following a hip fracture.²⁹ Local authorities have a large role supporting and enabling people to return to their home after a fall via community interventions such as home adaptations, reablement and care services, alongside providing supported living and care home environments for those unable to return to independent living. The high costs associated with this role may in part explain why these conditions were strongly represented in the assessments and strategies.

It is disappointing that other musculoskeletal conditions are getting missed in comparison. 26% of local authorities did not recognise the needs of people living with *arthritis* in their JSNAs. This is worrying considering the large size of the burden.³⁰ Given the widespread prevalence of osteoarthritis, it is unfair for local authorities to fail to identify the needs of people living with painful osteoarthritis.

Key risk factors for osteoarthritis are ageing, obesity and physical inactivity. Osteoarthritis is amenable to a public health approach and has been described as ‘an unrecognised public health priority’ by the Chief Medical Officer, Professor Sally Davies.³¹ Obese people are more than twice as likely to develop osteoarthritis of the knee as those of normal body weight.³² The increase in risk of developing knee osteoarthritis due to obesity appears to be similar to that of developing high blood pressure or type 2 diabetes due to obesity.³³ Local authorities with their recently realised responsibility for delivery of public health, are ideally placed to incorporate lifelong musculoskeletal health within their physical activity and weight management programmes.

62% of local authorities also failed to recognise the health needs of people living with back pain in their JSNAs. Back pain is a major cause of both pain and working days lost. Though often self-limiting, one in six adults aged over 25 years reports *back pain lasting over three months in the last year*.³⁴ There is a wider societal impact: £10 billion of indirect costs are attributable to back pain in the UK.³⁵

The prevalence of back pain is high: 17% of the population in England has back pain.³⁶ When even the local authorities with the lowest prevalence^{††} have more than one in ten of their population with back pain, there is no justification for not including it in their JSNA.

Across all musculoskeletal conditions, mentions in JSNA did not necessarily translate clearly into JHWSs. There could be a number of reasons for this: local authorities may have focused across all long term conditions or risk factors which impact on a number of conditions. Or arthritis may not be a local priority; or there may be a local perception that ‘nothing can be done’ to tackle the pain of arthritis. For more detailed information please see the tables in the Appendix and the detailed companion document online at www.arthritisresearchuk.org.

^{††} Please note that 6 local authorities mentioned two categories of conditions the most frequently and therefore more than one condition was included in the second analysis for 6 local authorities.

^{††} The range for back pain is between 11.78% and 21.44% of the population in England. The average is 17% of the population has back pain.

What does good look like: Hampshire County Council's focus on musculoskeletal conditions

Hampshire County Council published two dedicated chapters about musculoskeletal health: one assessing the needs of people living with musculoskeletal conditions specifically and a second looking at chronic pain generally. While recognising the difficulties posed by the lack of population level data about prevalence of musculoskeletal conditions, they were clear that an ageing population will most likely increase demand for services.

Using national data about GP visits, they estimated the local population affected by musculoskeletal conditions. They illustrated current impact and predicted future demand by incorporating clinical activity and trend data for fall and fractures, and hip and knee replacements. Unexpected variation in rates of a number of clinical procedures was described and questioned. Their focus on the impact of chronic pain was particularly strong. They included national data from sources including the Health Survey for England 2011 chapter on chronic pain, and the Labour Force Survey statistics for musculoskeletal work-related illnesses to understand relationships with quality of life and workplace participation.

Hampshire's assessment of the needs of the population with musculoskeletal conditions is generally good. It takes a life-course approach to bone health, demonstrating that at every age there are modifiable factors that will reduce fragility fractures in later life. The breadth of musculoskeletal conditions and their impact is addressed, recognising the burden on individual health, the impact on workplace participation and the implications for services. There is a thorough presentation of the evidence for what works to improve musculoskeletal health, and clear recommendations for the next steps that should be taken. Although there is some recognition of the lifecourse relationship of obesity and physical inactivity with poor musculoskeletal health, this is not carried through into the recommendations.



9. CONCLUSION AND RECOMMENDATIONS

The transfer of responsibility for public health to local authorities is a welcome opportunity to adopt new approaches to old problems, not least in relation to musculoskeletal conditions.

Local authorities should know the needs of their local residents better than anyone, and it is right that they, in conjunction with other agencies, are the ones to produce JSNAs to assess the health needs of their local community and then devise a strategy to meet those needs.

This is why it is so disappointing that so many local authorities seem to have a blind spot when it comes to the most common musculoskeletal conditions, osteoarthritis and back pain. The evidence is clear: there is widespread prevalence of osteoarthritis in local authority areas, ranging between 15% and 21%.³⁷

It is therefore regrettable that only 36% of local authorities have included osteoarthritis in their JSNA; and 26% of local authorities have not mentioned either osteoarthritis or arthritis. It is even more regrettable that, despite the impact that it can have on quality of life, only one local authority included osteoarthritis in their JHWS.

Unfortunately the picture is similar in relation to back pain. Although our musculoskeletal calculator shows that 17% of the general population suffer from some form of back pain across the country,³⁸ only 38% of local authorities have assessed the needs of those with back pain in their JSNAs.

There is an opportunity for change and improvement here. It is for this reason that we are calling on Overview and Scrutiny Committees to investigate why the needs of people – in particular those with arthritis and back pain – are being missed from Joint Strategic Needs Assessments.

Although musculoskeletal conditions remain an area in which we need to collect much more data, estimates on prevalence are now becoming available,³⁵ and they must be used if local authorities are to develop a more accurate picture upon which to base their decisions about services.

Whilst we welcome localism in relation to public health and all of the opportunities that it brings, there is an opportunity for greater partnership working between local and national agencies. Public Health England should act as a hub of best practice; and the National Audit Office should use its new responsibilities to bring greater understanding of the effectiveness of the JSNA/JHWS in relation to long term conditions, including musculoskeletal conditions.

Finally, we would like to see the Department of Communities and Local Government working in partnership with the Department of Health on a national portal for JSNAs and JHWSs. This will enable local authorities to learn from each other: it will also enable easy access and comparison by those residents who wish to hold their local elected representatives to account.

This project has recognised that, in relation to falls and fragility fractures, local authorities are demonstrating the potential of the assessment process, with 93% mentioning osteoporosis, falls and fractures. This is to be welcomed. But if the JSNA process is to provide a *fair* assessment of musculoskeletal conditions in England, it needs to ensure that the documents truly reflect the health needs of the local population.

³⁵ Sources include the 2011 Global Burden of Disease and Arthritis Research UK's MSK Calculator.

9.1 Recommendations

The following recommendations are intended to build upon the work that is already done, or is in progress, to improve the health and wellbeing, both physically and mentally, for people affected by musculoskeletal conditions. They reinforce how organisations at different levels each have a role in ensuring that the needs of the population are accurately assessed and services are subsequently available, easily accessible and fit for purpose to ultimately deliver real improvements in musculoskeletal health.

- » Overview and Scrutiny Committees should conduct an investigation in local authorities that this report identifies as failing to accurately assess the needs of those in their area living with musculoskeletal conditions.
- » Local authorities should include data on major musculoskeletal conditions in their JSNA and JHWS, using data sources including the musculoskeletal bulletins produced jointly by Arthritis Research UK and Public Health England.
- » The Department of Communities and Local Government and the Department of Health should jointly host a national portal with up to date links to every JSNA and JHWS, to share learning between local people, national charities and local government.
- » For the National Audit Office, using its new responsibilities under the Local Audit and Accountability Act 2014, to assess the effectiveness of the JSNA/JHWS process in relation to long term conditions including musculoskeletal conditions, and in particular to determine whether this can be improved through the availability of increased guidance for local authorities in relation to these conditions.
- » Public Health England should act as a hub for the dissemination of best practice and data amongst local authorities, driving improvement in services for people with musculoskeletal conditions.

9.2 References

- 1 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator
- 2 National Osteoporosis Society (2011), 25th Anniversary report – a fragile future
- 3 National Institute for Health and Clinical Excellence (June 2011), CG 124 Hip fracture: the management of hip fracture in adults
- 4 N Maniadakis and A Gray (2000), The economic burden of back pain in the UK, *Pain* 84(1): 95–103
- 5 Department of Health (2011), England level data by programme budget: 2010-11.
- 6 Arthritis Research UK Primary Care Centre (2009), Musculoskeletal Matters.
- 7 Office for National Statistics (2014), Full report: Sickness absence in the labour market, February 2014
- 8 Oxford Economics (March 2010), The economic costs of arthritis for the UK economy.
- 9 C Murray et al. (2013), UK health performance: findings of the Global Burden of Disease Study 2010, *Lancet* 381:9871, 997-1020.
- 10 Office for National Statistics (2014), Full report: Sickness absence in the labour market, February 2014
- 11 Oxford Economics (March 2010), The economic costs of arthritis for the UK economy.
- 12 N Maniadakis and A Gray (2000), The economic burden of back pain in the UK, *Pain* 84(1): 95–103
- 13 Public Service and Demographic Change Select Committee (2013), Ready for Ageing?, HL Paper 140, Report of Session 2012-13.
- 14 National Joint Registry (2012), National Joint Registry for England and Wales 9th Annual report 2012.
- 15 Arthritis Research UK National Primary Care Centre, Keele University (2009), Musculoskeletal Matters.
- 16 National Osteoporosis Society (2011), 25th Anniversary report – a fragile future
- 17 National Institute for Health and Clinical Excellence (June 2011), CG 124 Hip fracture: the management of hip fracture in adults
- 18 Arthritis Research UK (2013), Understanding arthritis: a parliamentary guide to musculoskeletal health
- 19 C Murray et al. (2013), UK health performance: findings of the Global Burden of Disease Study 2010, *Lancet* 381:9871, 997-1020.
- 20 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator
- 21 National Osteoporosis Society (2011), 25th Anniversary report – a fragile future
- 22 Department of Health (2009), Prevention package for older people
- 23 Department of Health (2011) *Joint Strategic Needs Assessment and joint health and wellbeing strategies explained – commissioning for populations*
- 24 Department of Health (2013) *Statutory Guidance on Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies*
- 25 Department of Health (2013) *Statutory Guidance on Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies*
- 26 Department of Health (2011) *Joint Strategic Needs Assessment and joint health and wellbeing strategies explained – commissioning for populations*
- 27 Department of Health (2013) *Statutory Guidance on Joint Strategic Needs Assessments and Joint Health and Wellbeing Strategies*
- 28 Department of Health, *Joint Strategic Needs Assessment and joint health and wellbeing strategies explained – commissioning for populations*, 5 December 2011
- 29 National Osteoporosis Society (2011) 25th Anniversary Report-a fragile future.
- 30 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator
- 31 Department of Health (2012). Annual report by the Chief Medical Officer (CMO), Professor Sally Davies, on the state of the public's health in England.
- 32 Blagojevic M et al. (2010). Risk factors for osteoarthritis of the knee in older adults: a systematic review and meta-analysis. *Osteoarthritis Cartilage* 18(1):24-33
- 33 Kearns K et al (2014). Chronic disease burden associated with overweight and obesity in Ireland: the effects of a small BMI reduction at population level. *BMC Public Health* 14:143
- 34 Elliott et al. (1999), The epidemiology of chronic pain in the community, *Lancet* 354(9186), 1248-52.
- 35 N Maniadakis and A Gray (2000), The economic burden of back pain in the UK, *Pain* 84(1): 95–103
- 36 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator
- 37 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator
- 38 Arthritis Research UK and Imperial College (2014) The Musculoskeletal Calculator. Available from www.arthritisresearchuk.org/mskcalculator

9.3 Acknowledgements

Arthritis Research UK is very grateful to all those who have contributed to this report.

Our thanks go to Paul Ogden, Senior Advisor (Public Health) at the Local Government Association, and John Battersby, Consultant in Public Health Medicine, Knowledge and Intelligence Team (East) at Public Health England, for reviewing the report before publication.

In addition, we thank MHP Health, whom we commissioned to conduct the research used in this report.

This report was produced by the Arthritis Research UK policy and public affairs team. Further information on our work is available at **www.arthritisresearchuk.org/policyreports**

10. APPENDIX

Methodology

The purpose of the research was two-fold: firstly, to understand if local authorities were routinely identifying and planning for people with musculoskeletal conditions in their JSNAs and JHWSs. Secondly, for those musculoskeletal conditions which received the most mentions in each JSNA and JHWS, we wished to identify the level of understanding of burden, risk factors and commitments to action.

1. Collection of JSNA and JHWS documents

A list of all 152 local authorities with responsibility for public health in England was assembled. This list identified that there was a mix of local authorities ranging from London boroughs to unitary authorities with upper tier responsibilities. In the context of this report when we refer to 'local authorities' we are referring to those local authorities with a statutory duty to produce a Joint Strategic Need Assessment and Joint Health and Wellbeing Strategy.

This list was utilised to source all JSNA and JHWSs over a period of three weeks from 17th February 2014 and 7th March 2014. The documents were sourced primarily from internet sources with a small number being sourced by contacting the relevant local authorities directly.

2. Quantitative analysis

The first part of the analysis was a quantitative assessment of the JSNAs and JHWSs. The number of references to musculoskeletal conditions within JSNAs and JHWSs across England were recorded for 152 JSNAs and 151 JHWSs.* These mentions were categorised and logged across four categories:

- » Generic mentions of arthritis, musculoskeletal (MSK) conditions/diseases and joint pain;
- » Osteoarthritis: the most common form of arthritis;
- » Back pain;
- » Fragility fractures, osteoporosis, and falls owing to an underlying musculoskeletal condition

There are a substantial number of musculoskeletal diseases, but this project sought to focus on those musculoskeletal conditions with a high prevalence. In the interest of fairness, we focused on musculoskeletal conditions in which the burden is such that we would envisage an assessment of population level health conditions would result in the identification of these conditions.

The specific terms we searched for under each category were as follows:

- » **Generic mentions of arthritis and musculoskeletal conditions:** we looked at the inclusion of the key words: 'arthritis'; 'musculoskeletal' and its abbreviations (MSK/MSD/MSD) and 'joint pain'.
- » **Osteoarthritis:** we looked at the inclusion of the specific term 'osteoarthritis'.
- » **Back pain:** we looked at the inclusion of the specific term 'back' and 'back pain'.
- » **Fragility fractures and osteoporosis:** we looked at the inclusion of the specific terms 'fragility fractures' (this is a term which refers to a fall from standing height which results in a broken bone), 'osteoporosis', 'bone health' and 'falls' when used in relation to osteoporosis.

We began by seeking to understand, which local authorities utilised the broad terminology of 'musculoskeletal conditions/disease/problems', alongside 'arthritis' and 'joint pain'. Owing to the prevalence of osteoarthritis, the most common form of arthritis, and back pain, a major cause of working days lost, we wished to focus on these as separate entities. We also wished to focus on fragility fractures owing to the prevalence and impact on both the health and local authority services. By collecting these data separately, we would be able to identify and understand if local authorities were stronger at identifying one musculoskeletal condition above others.

* Please note that we were unable to obtain Herefordshire County Council's JHWS.

Any mention of the above terms was logged as a single mention with the total number of mentions collected by local authority and by document type (JSNA/JHWS). To understand the frequency of mentions, we grouped these together under four headings:

- » 0 mentions: no mentions
- » 1-4 mentions: basic
- » 5-49 mentions: moderate
- » 50+ mentions: substantial

This then enabled us to understand how a local authority was performing across the different categories of musculoskeletal conditions, but also for us to identify any variation or commonalities across England.

3. Depth of understanding analysis

The second part of the project was an assessment on the depth of understanding demonstrated and context. We examined the four categories of musculoskeletal conditions and identified which 'category' of condition had the most mentions in each JSNA and JHWS.

We then examined the quality of understanding given to three areas:

1. the burden of musculoskeletal conditions (an assessment of the numbers affected – prevalence and incidence – morbidity including disability; mortality rates; cost and impact to individuals, the health service and social care);
2. awareness of the risk factors (characterisation of the risk factors in relation to musculoskeletal conditions. These risk factors include age, physical activity, nutrition and obesity);
3. commitments to action (reference to national guidance, local initiatives and commitments).

For each JSNA and JHWS we gave an impressionistic rating out of 3 for each category. For example, if a local authority gave a cursory assessment of burden of musculoskeletal conditions then they were rated one out of three; whilst a full assessment and articulation of burden would be ranked as three. Each JSNA and JHWS could therefore achieve a maximum rating of 9 each; or 18 in total.

Following assessment, we then grouped the ratings together under four headings:

- » 0 = no contextual mentions
- » 1-3 per JSNA or JHWS: at the start
- » 4-6 per JSNA or JHWS: developed
- » 7-9 per JSNA or JHWS: advanced

This enabled us to identify whether a local authority was 'at the start' of their journey or whether the understanding in these documents was well developed ('advanced').

In order to develop consistent ratings for each category, local authorities were assessed on:

- » The level and range of information included
- » The balance of information and data included particularly between national information and more detailed local assessments

4. Challenges

Obtaining JSNAs and JHWSs

Local authorities choose to display their assessments in a number of different ways: some included all documents in their primary JSNAs; whilst other decided to 'house' some of their insights in supporting documents. As this project wished to compare 'like with like', if the supporting document was of clear and substantial relevance to the assessment (eg identifying health needs for people with long term conditions) it was included in the assessment.

Part of the statutory duties relating to JSNAs is that they should be publicly available. If, therefore, a public health team did have supporting documentation which was not made publicly available on their website, this project would not have been able to identify it.

It was challenging to both identify and obtain all JSNAs and JHWSs across England. The ease of finding them on websites varied; clarity of what formed part of the assessment and what didn't varied; there were also references to documents which were then not publicly available. A few areas had to be contacted multiple times in order to receive them and in the end, one local authority did not supply a JHWS.

We do recognise that local authorities may have other internal supporting documents which articulate in greater detail their understanding of musculoskeletal conditions. As JSNAs and JHWSs are intended to be publicly available statutory documents, the research wished to focus on the published information that can be utilised to hold the system to account. As these documents are supposed to both exist and be publicly available, it's important for accountability that local residents are able to access these with ease.

Language

We appreciate that some local authorities may have utilised the generic terms of 'arthritis' when they were referring to osteoarthritis, the most common form of arthritis. This meant that whilst they were assessed as having identified the generic 'arthritis' category, they may have been assessed as not having identified 'osteoarthritis' as a local health need.

Interpretation of documents

Any process for rating local authorities in this manner is naturally subjective, being open to interpretation and therefore cannot be deemed comprehensive.

One challenge of the approach taken was that, JSNAs are primarily focused on burden and therefore evaluating them on their inclusion of commitments to action may result in a lower mark for those local authorities which focused on commitments to action in their JHWSs.

Likewise, JHWSs are focused on how a local area can meet the challenges set out in the JSNA and are therefore more action-orientated. Again, a local authority which focused on a strong and clear articulation of the burden in its JSNA rather than in its JHWS may result in a lower result.

It's important to recognise that those local authorities whose documents were identified as developed and advanced are still leading the way in their understanding of musculoskeletal conditions at a local level.

10.1 Overview of data tables

You can see the full tables, including the results for each local authority in the accompanying document “A fair Assessment: Data on the extent that local authorities prioritise musculoskeletal conditions”. This can be seen at www.arthritisresearchuk.org/jsna

Table one: Number of local authorities which mentioned musculoskeletal conditions in their Joint Strategic Needs Assessments.

Number of mentions by local authorities with statutory responsibility for public health in their Joint Strategic Needs Assessment (% of 152 councils with responsibility for public health)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Not included (0)	46 (30.26%)	97 (63.82%)	94 (61.84%)	10 (6.58%)
Basic (1-4)	65 (42.77%)	51 (33.55%)	48 (31.58%)	35 (23.03%)
Moderate (5-49)	37 (24.34%)	4 (2.63%)	7 (4.61%)	69 (45.39%)
Substantial (50+)	4 (2.63%)	0	3 (1.97%)	38 (25%)
Overall inclusion	106 (69.74%)	55 (36.18%)	58 (38.16%)	142 (93.42%)

Table two: Spread of mentions by local authorities in their Joint Strategic Needs Assessments by condition

Spread of mentions by local authorities with statutory responsibility for public health in their Joint Strategic Needs Assessment by condition (% level of mentions in each JSNA by condition)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Basic (1-4)	65 (61.32%)	51 (92.73%)	48 (82.76%)	35 (24.65%)
Moderate (5-49)	37 (34.91%)	4 (7.27%)	7 (12.07%)	69 (48.59%)
Substantial (50+)	4 (3.77%)	0	3 (5.17%)	38 (26.76%)
Overall inclusion	106 (100%)	55 (100%)	58 (100 %)	142 (100%)

Table three: Number of local authorities which mentioned musculoskeletal conditions in their Joint Health and Wellbeing Strategies

Number of mentions by local authorities with statutory responsibility for public health in their Joint Health and Wellbeing Strategies (% of 151 councils* with responsibility for public health)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Not included (0)	128 (84.77%)	150 (99.34%)	141 (93.38%)	65 (43.05%)
Basic (1-4)	23 (15.23%)	1 (0.66%)	10 (6.62%)	63 (41.72%)
Moderate (5-49)	0	0	0	22 (14.57%)
Substantial (50+)	0	0	0	1 (0.66%)
Overall inclusion	23 (15.23%)	1 (0.66%)	10 (6.62%)	86 (56.95%)

(The Health and Wellbeing Strategy for Herefordshire County Council was not publicly available for analysis).

Table four: Spread of mentions by local authorities in their Joint Health and Wellbeing Strategy by condition

Spread of mentions by local authorities with statutory responsibility for public health in their Joint Health and Wellbeing Strategies by condition (% level of mentions in each JHWS by condition)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Basic (1-4)	23 (100%)	1 (100%)	10 (100%)	63 (73.26%)
Moderate (5-49)	0	0	0	22 (25.58%)
Substantial (50+)	0	0	0	1 (1.16%)
Overall inclusion	23 (100%)	1 (100%)	10 (100%)	86 (100%)

Table five: Rating of context of mentions by local authorities in their Joint Strategic Needs Assessments

Rating of the depth in which MSK conditions are considered in Joint Strategic Needs Assessments by most frequent category mention (144 JSNAs – 94.74%) included a MSK condition)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Rating of the extent to which MSK conditions are addressed in the JSNA	16 local authorities mentioned this category most frequently amongst MSK conditions	No local authorities mentioned osteoarthritis most frequently amongst MSK conditions	1 local authority mentioned back pain most frequently amongst MSK conditions	127 local authorities mentioned fragility fractures most frequently of all MSK conditions
No context	0	0	0	1 (0.79%)
At the start (1-3)	14 (87.50%)	0	0	43 (33.86%)
Developed (4-6)	1 (6.25%)	0	1 (100%)	51 (40.16%)
Advanced (7-9)	1 (6.25%)	0	0	32 (25.20%)

Table six: Rating of context of mentions by local authorities in their Joint Health and Wellbeing Strategies

Rating of the depth in which MSK conditions are considered in Joint Health and Wellbeing Strategies by most frequent category mentions (100 (66.23%) included a MSK condition)				
	Arthritis, musculoskeletal conditions and joint pain	Osteoarthritis	Back pain	Fragility fractures, osteoporosis and bone health
Rating of the extent to which MSK conditions are addressed in the JHWS	16 local authorities mentioned this category most frequently, with their mentions being considered as being:	No local authorities mentioned osteoarthritis most frequently amongst MSK conditions	4 local authorities mentioned back pain most frequently, with their mentions being considered as being:	86 local authorities mentioned this category most frequently, with their mentions being considered as being:
No context	0	0	0	0
At the start (1-3)	16 (100%)	0	4 (100%)	63 (73.26%)
Developed (4-6)	0	0	0	20 (23.26%)
Advanced (7-9)	0	0	0	3 (3.49%)

Please note that 6 local authorities mentioned two categories of conditions the most frequently and therefore more than one condition was included in the second analysis for 6 local authorities.

Notes

Arthritis Research UK
Copeman House
St Mary's Gate
Chesterfield
S41 7TD

www.arthritisresearchuk.org

 [@ArthritisRUK](https://twitter.com/ArthritisRUK)

 [/arthritisresearchuk](https://facebook.com/arthritisresearchuk)