

EALING JSNA 'Focus on' Musculoskeletal Health February 2018

The Joint Strategic Needs Assessment (JSNA) is a statutory document published by the London Borough of Ealing and NHS Ealing Clinical Commissioning Group, which describes the health and social care needs of the population. The JSNA contains topic and theme-based chapters, which are updated on a rolling basis. The 'Focus on' series provides succinct chapter summaries from the JSNA.

Navigate by scrolling each slide or clicking on the section buttons on the bottom of each slide

Sections may contain more than one slide

EALING JSNA 'Focus on' Musculoskeletal Health

Key facts

December 2017

Musculoskeletal disorders comprise a heterogeneous collection of more than 200 separate conditions, which affect bones, joints, muscles and the spine, as well as rarer autoimmune conditions. Common symptoms include pain, stiffness and a loss of mobility and dexterity.

15 million people in England live with musculoskeletal disorders. People live with musculoskeletal disorders for more years of their lives than any other condition. 87% of people with chronic pain will have at least one other significant medical problem; the most frequent being cardiovascular disease and depression.

Facts and figures

- 55,000 people in Ealing (16% of the total population) have chronic low back pain
- 35,000 people in Ealing (10% of the total population) have moderate or severe osteoarthritis of hips or knee
- 1,300 people in Ealing aged over 55 were admitted with falls in 2017

Population groups

- The prevalence of musculoskeletal disorders rises with age, and is higher in women than men at all ages
- Half of the population aged over 75 will have a chronic musculoskeletal problem
- One in three people aged over 65 will be seen in the community musculoskeletal services over a five year period

Reducing inequalities

- Increase physical activity, particularly in older people and those from ethnic minorities
- Provide and increase uptake of falls prevention services and fracture liaison services
- Improve access to local services for management of chronic pain
- Reduce unwarranted variation in referrals to musculoskeletal services

National and local strategies

- *NHS England*: Self-care support programme, patient activation
- *NHS England*: Discharge to Assess (Home First)
- *NHS England*: Increasing access to IAPT therapists for people with chronic pain
- *NHS England*: Triage: Right Place, Right Time, Right Therapist
- *NHS RightCare*: Shared decision-making
- *STP*: Fracture Liaison Services, Musculoskeletal Pathways
- *STP*: Standards of Care, Commissioning Policies

Key facts

Musculoskeletal Health

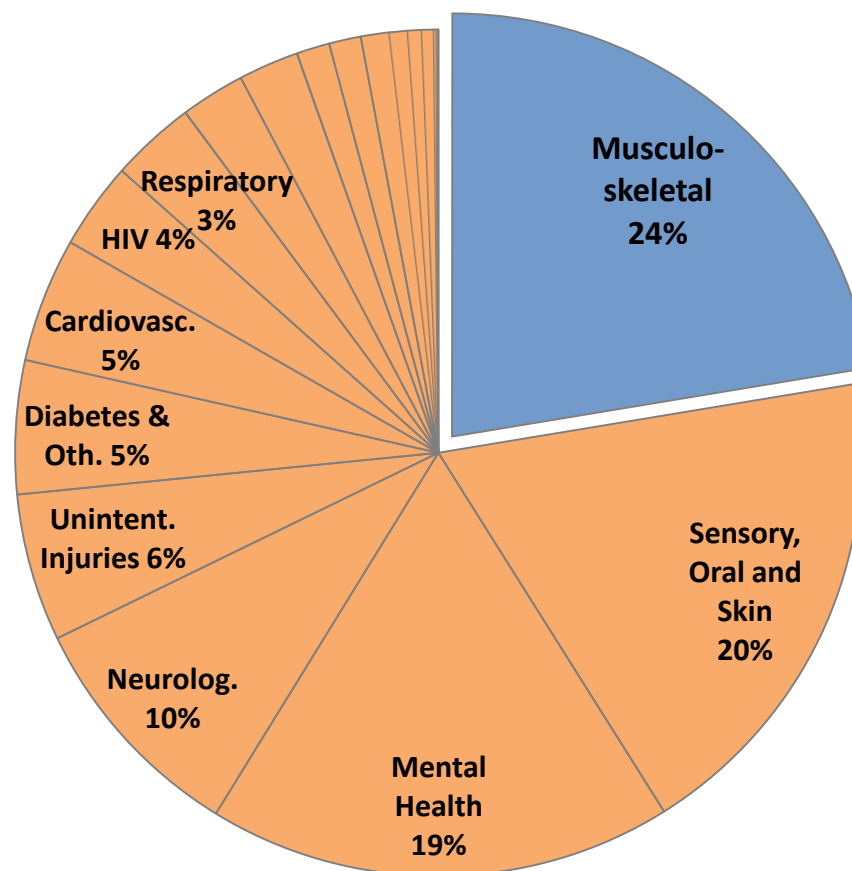
Burden of Musculoskeletal Disease

- The Global Burden of Disease, England Dataset 2016 shows that people live with musculoskeletal disorders for more years of their lives than any other condition
- Low back and neck pain are the leading cause of musculoskeletal-related Years Lived with a Disability (YLDs)
- Falls are the second leading cause of musculoskeletal-related Years Lived with a Disability (YLDs)
- Musculoskeletal disorders comprise the third highest cause of Disability-Adjusted Life Years (DALYs) after cancer and cardiovascular disease, and ahead of mental health, respiratory diseases and diabetes

Years Lived with a Disability (YLDs) is measured by taking the prevalence of the condition multiplied by the disability weight for that condition. Disability weights reflect the severity of different conditions, and are developed through surveys of the general public.

Disability-Adjusted Life Years (DALYs) represents the gap between where the UK's health is now, and full or 'normative health'. It is the sum of years lost to life through premature death due to disease, and the loss of quality of life for those living with a long term condition.

Years Lived with Disability

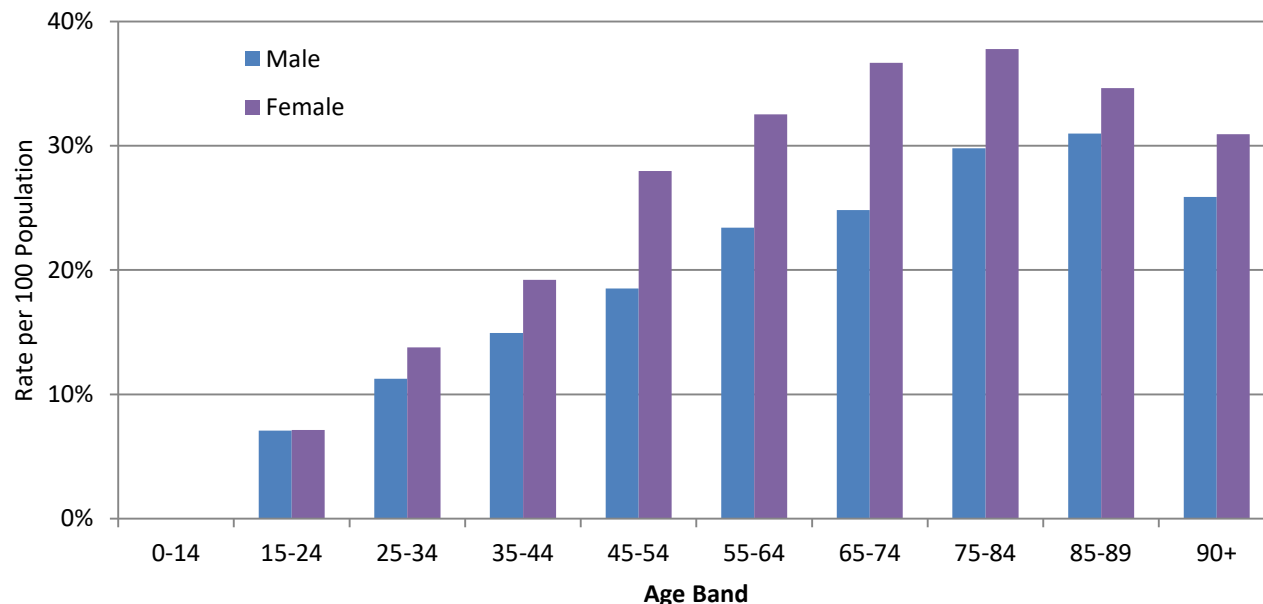


Setting the scene: Ealing

- Referrals to community musculoskeletal services reflects the rising prevalence with age, and the higher prevalence in women in the population
- Referral rates in the very elderly age bands fall, possibly due to low expectation of benefit from referral



Musculoskeletal Health



Musculoskeletal conditions in Ealing, population 350,000 in 2017

	People	% Population
Painful conditions		
Chronic low back pain	55,000	16%
Moderate or severe osteoarthritis of hips or knee	35,000	10%
Hip and knee replacements, in 2017	535	0.2%
Inflammatory conditions		
Rheumatoid arthritis - and a similar number will have other systemic inflammatory conditions	2,500	0.7%
Metabolic bone conditions		
Osteoporosis - and a larger number will have osteopenia	♀ 8,000	2.2%
Admissions for falls, aged over 55 in 2017	1,300	0.4%
Hip fractures, aged over 65 in 2016	210	0.1%

Setting the scene: Ealing

Musculoskeletal Health



Physical Activity



- 28% of adults do less than 30 minutes physical activity per week
- 39% of adults participate in 30 minutes of an organised activity once per week
- 56% of adults do more than 150 minutes physical activity per week
- 61% of adults would like to do more exercise than they currently do

Obesity and Osteoarthritis

- Obese people are 14 times more likely to develop osteoarthritis of the hips or knees
- Modest weight loss (4-7kg) combined with physical activity relieves symptoms and delays progression of osteoarthritis
- Admission rates for knee replacements are higher in areas of both high deprivation and areas of increased non-white ethnicity (*see map below*)
- This is consistent with the association of higher prevalence of osteoarthritis in areas of higher deprivation

Co-morbidity

- 87% of people with chronic pain will have another significant medical problem
- 31% of people with musculoskeletal pain have moderate or severe depression
- Co-morbid anxiety and depression are prognostic of poorer outcomes for musculoskeletal pain, but are amenable to treatment
- People aged over 65 years have on average 3 other significant medical problems



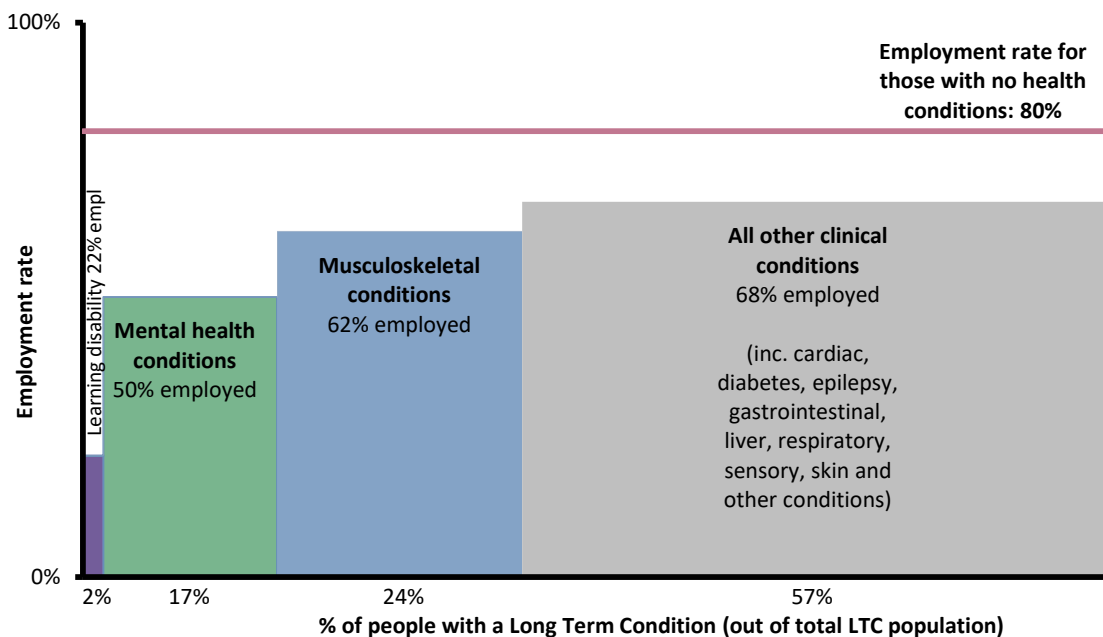
Setting the scene: Ealing

Musculoskeletal Health

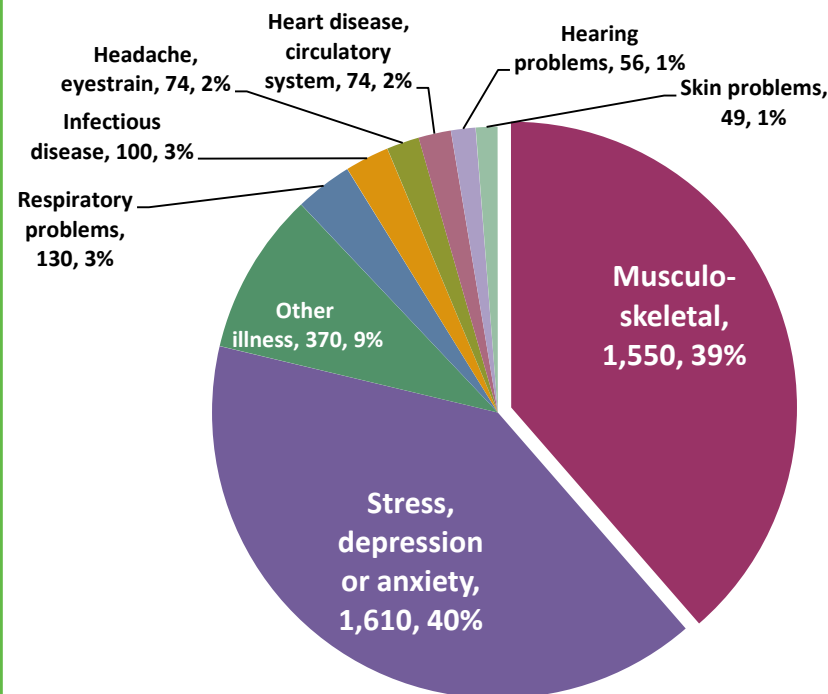
Good musculoskeletal health is integral to a full working life. It supports functional mobility and dexterity, balance and co-ordination, and contributes to muscular strength and endurance; essential to nearly all forms of work. This enables people to stay physically and mentally fit, and reduce the occurrence of other health problems.

Disability Employment Gap

- The disability employment gap is a measure of worklessness due to disability and ill-health. Musculoskeletal conditions are major contributor to this gap
- This is partly due to injuries attributed to work, and partly due to the interaction of people with their work environment



Self-Reported Illness Rate Caused or Made Worse by Work per 100,000 employed in last 12 months



Loss of work in Ealing, 2017, all musculoskeletal conditions

- 1,410 Incapacity and ESA benefit claims
- 210,000 working days lost
- 1,380 people off work with work-related back pain

Future need

Musculoskeletal Health



The population of Ealing is likely to grow from 348,000 in 2016 to 394,000 by 2036 – an annual growth rate of 0.7%.

The number of people aged over 65 is expected to increase by 55% by 2036, and much of the time spent with longer life expectancy is likely to be with long term health problems, including musculoskeletal disorders.

Age-related conditions

- Osteoarthritis is a common musculoskeletal problem; 50% of people over age 75 seek treatment for osteoarthritis
- The number of patients consulting with osteoarthritis will rise by 3.1% per annum between 2010 and 2035 due to longevity and rising obesity; 4 times higher than the annual population growth
- Muscle mass, strength and bone density decline with age, leading to painful joints and osteoporosis
- One in three adults over 65 have falls each year, leading to loss of independence and social isolation
- Poor nutrition in older life can exacerbate muscle mass and bone density decline, exacerbating osteoporosis and falls
- 29% people die each year following a hip fracture, and 25% of these are directly related to the fracture

Working age and Retirement

- Functional capacity for work declines progressively with age
- 42% of older workers aged 50-64 are living with a health condition
- The effect of rising retirement age is mixed:
 - Decreasing overall activity levels and declining musculoskeletal health
 - More people of working age will be affected by osteoarthritis and are consequently more likely to retire early

Chronic pain

- 8.5% of the adult population have severe musculoskeletal pain
- There is no community or hospital pain service in the borough; people have to travel outside the borough to access pain management services

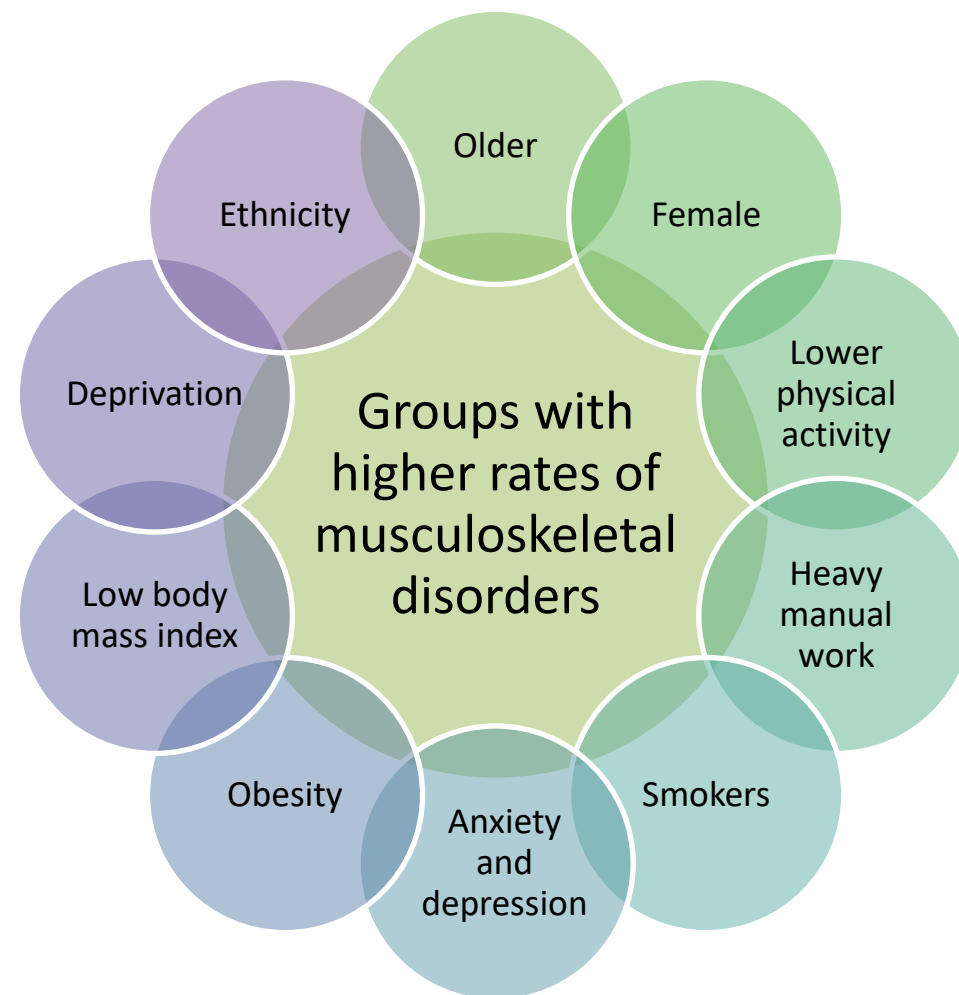
NW London Sustainability and Transformation Plan

- Eliminate unwarranted variation in access and quality of services
- Improve outcomes from long term condition management
- Develop a fully integrated older persons frailty service
- Develop fragility fracture liaison services
- Facilitate early supported discharge after orthopaedic operations

What influences this topic?

Musculoskeletal Health

- The prevalence of musculoskeletal disorders rises with age and is more common in women than men at all ages
- Low physical activity leads to musculoskeletal pain, osteoarthritis, osteoporosis, reduced muscle strength and falls
- Heavy manual work increases the risk of back pain and lower limb osteoarthritis
- Smoking is associated with chronic pain, osteoporosis, reduced muscle strength, increased risk of rheumatoid arthritis and gout
- Anxiety and depression are associated with a poorer prognosis for functional recovery, and the outlook for musculoskeletal symptoms improves if the mental health disorder is treated
- Obesity increases the risk of lower limb osteoarthritis, low back pain and gout. Reducing weight relieves symptoms and delays progression of knee osteoarthritis
- Low body mass index and poor nutrition are associated with lower muscle mass, osteoporosis and increased risk of falls
- Musculoskeletal pain prevalence rises significantly with increasing deprivation at all ages, and is associated with a significant increase in global disability at ages 45-64
- Musculoskeletal pain prevalence is higher in ethnic groups due to differences in personal experience, learning and cultural background



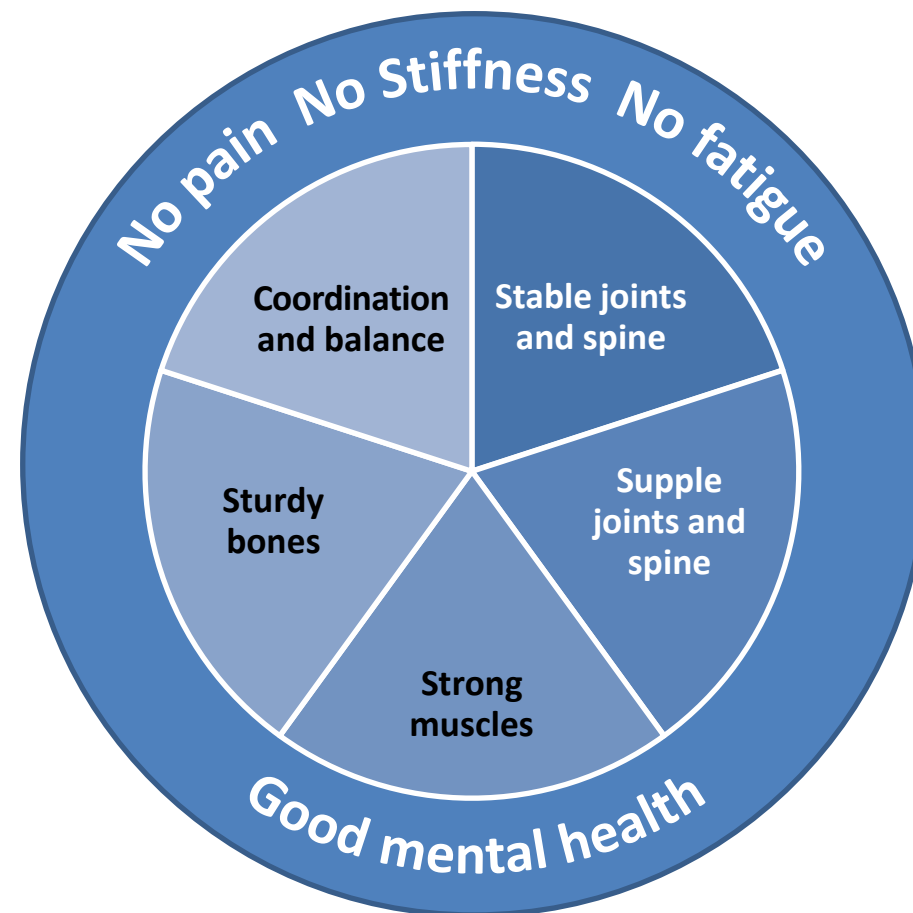
What influences this topic?

Musculoskeletal Health

Factors affecting musculoskeletal health

Several factors come together to produce musculoskeletal health. Restoring musculoskeletal health should aim to address these pre-requisite factors:

- Supple and stable spine and joints to support a wide range of movement
- Strong muscles to give power to movement
- Sturdy bones to absorb the knocks of daily living without breaking
- Healthy nervous system to oversee activity, co-ordinate and balance
- Good mental health to provide motivation and energy for being physically active without pain, stiffness or fatigue



What works?

Musculoskeletal Health

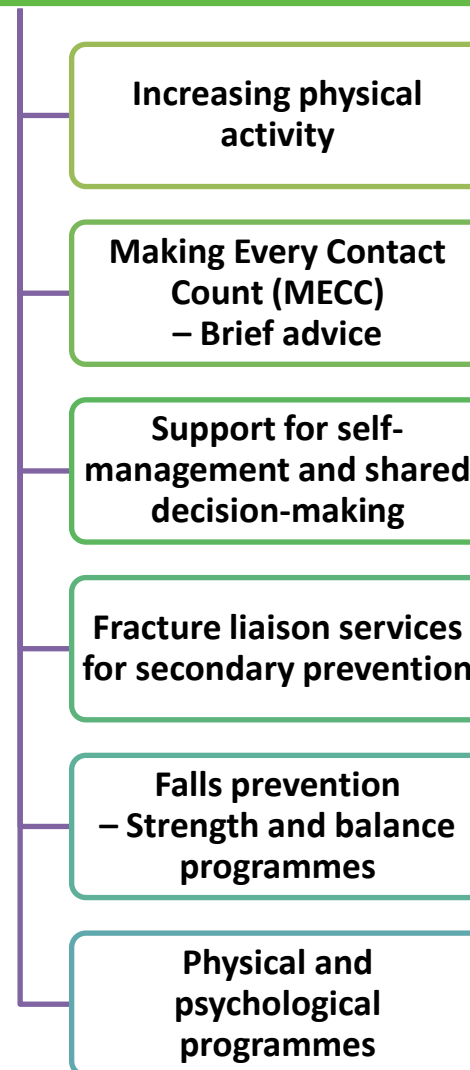
PRIMARY PREVENTION reduces the risk of musculo-skeletal conditions developing: increasing physical activity, reducing obesity, reducing smoking and improving nutrition

SECONDARY PREVENTION reduces the risk of musculo-skeletal conditions worsening: increasing physical activity and reducing obesity in people with back pain and lower limb osteoarthritis

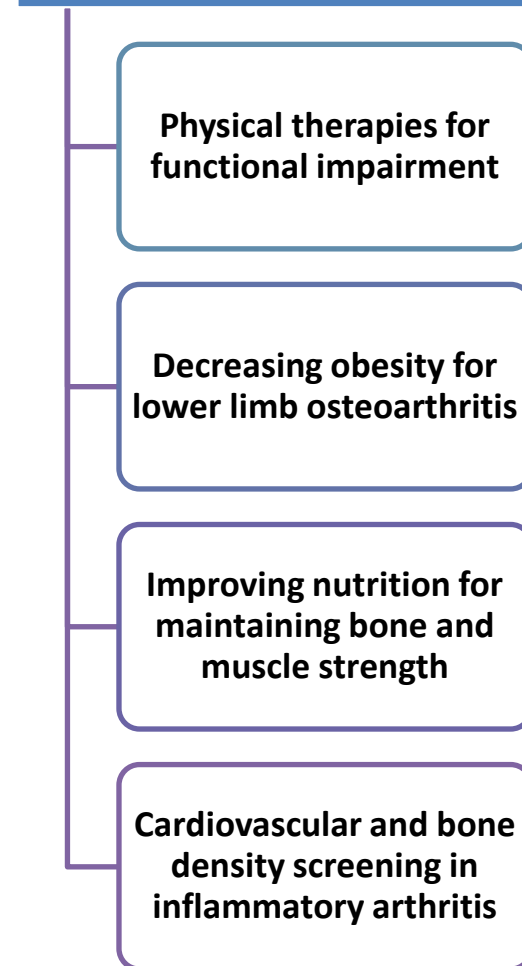
TERTIARY PREVENTION reduces the impact of established musculoskeletal conditions: occupational health services to support remaining or returning to work, physical therapies to improve functional capacity

- Supporting self-management and facilitating shared decision-making improves outcomes and is cost-effective
- Multi-factorial falls prevention in people at high risk of falls, and secondary prevention of fragility fractures are clinically and cost-effective from NHS and societal perspectives, and are high priority programmes in NW London
- The ESCAPE pain study combined exercise, education and psychological approach in a group setting for the management of chronic knee pain. For every £1 spent on the ESCAPE pain programme, the NHS is estimated to save £5.20 due to improved pain control
- Return on Investment tools (ROI) are available from NICE and Public Health England. Most of these interventions are cost-effective from a societal perspective (e.g. productivity gains, social care costs), but for some interventions, there is uncertainty about the savings from a purely NHS perspective.

Clinically and cost-effective



Clinically effective



Assets and services

Musculoskeletal Health

The majority of NHS musculoskeletal care occurs in primary and community settings. 20% of the general practitioner (GP) registered population consult each year with a musculoskeletal disorder and about 68% of these patients are managed in primary care without onward referral. Community musculoskeletal services see a further 13% of patients per year. A fifth of the adult population attends the community musculoskeletal service at least once over a five year period, rising to a third of the population aged over 65.

Local Authority – Primary Prevention

- Ealing Council provides ‘Making Every Contact Count’ (MECC) training for primary care staff, community physiotherapists and community voluntary sector workers, to discuss lifestyle interventions, such as physical activity and weight loss with their patients and clients
- Ealing Council funds Strength and Balance Classes, Healthy Walks Programme, Everyone Active Exercise Referral Scheme, and promotes cycling schemes

Self-management

- GP Practice websites offers self-care advice and self-help options, guiding patients to see the right person, and provides a directory of local support services
- Ealing Community and Voluntary Sector (CVS) organisations provide chair-based exercises, healthy walks, yoga, relaxation therapies, massage, and healthy cooking sessions. Ealing CVS maintains a directory of voluntary sector projects and advice about healthy living

NHS Primary Care

- The Ealing Primary Care Standard is a 3½ year investment programme from 2017, to improve access and outcomes for people with health conditions in Ealing
- There are 12 activities that primary care will be expected to deliver to improve musculoskeletal health, including: primary and secondary prevention, referral management, chronic pain management, reducing worklessness related to musculoskeletal conditions and upskilling (workforce training) to manage musculoskeletal conditions in primary care

NHS Community Care

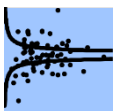
- Physiotherapy provided by London North West University Healthcare NHS Trust from 7 sites in the borough including Ealing and Claypods Hospitals
- Physiotherapy and falls services help people to regain movement and strength following illness, injury, or as a consequence of ageing
- The musculoskeletal interface service assesses people with more complex rehabilitation needs, chronic pain or those people that might need surgery, and organises investigations, joint and epidural injections, and consultant opinions
- The Ealing IAPT service (Improving Access to Psychological Therapies, West London Mental Health Trust) runs a long term conditions group (LTC) for patients with anxiety and depression who also suffer from a long-term health condition, including musculoskeletal problems

NHS Secondary care

- The population of Ealing is served by four acute NHS Trusts on 10 sites within a 7 mile radius in West London.
- London North West University Healthcare NHS Trust provides 45% of orthopaedic outpatient activity and 26% of elective inpatient activity.
- Imperial College Healthcare NHS Trust provides a further 33% of elective orthopaedic inpatient activity

Targets and outcomes

Musculoskeletal Health



Reduce unexpected and unexplained variation in referral rates from 27 out of 77 GP practices to ensure that people who would benefit from referral are referred, and support those who could be managed in primary care



The Clinical Standards Advisory Group targets for waiting times for physical therapies is 2-6 weeks. The Ealing community services Key Performance Indicator (KPI) is that 90% of patients should be seen in physiotherapy and interface services should be seen in 4 weeks. Currently, the waiting times are 12-16 weeks, and over 4,000 patients are waiting for treatment. Ealing CCG is reviewing options to reduce demand, improve capacity and throughput



The NHS Mandate states that the NHS is required to contribute to reducing the disability employment gap and increase integrated working between health services and work-related interventions. GPs will be expected to refer people for occupational support where appropriate



Patient reported outcome measures are reported by community services and hospital trusts. These show that patients receiving treatment consistently show significant improvements in function and quality of life



Healthcare utilisation is measured by:

- The rate of carrying out investigations: the community interface service has a low investigation rate of 20%, similar to other good practice schemes



- The rate of having surgery as a proportion of people referred for a surgical opinion (surgical conversion rate): the community services has an 80% conversion rate, typical for this type of service nationally. By contrast, patients referred directly from general practice have a much lower conversion rate and NHS England recommends that these patients should be triaged (see below)



The CCG encourages GPs to refer to the community clinics, rather than directly to hospital, in accordance with best practice advice from NHS England. This makes best use of clinical resources and improves outcomes for patients. Triage services ensure people are seen 'at the right time, in the right place, by the right person.' 75% of potential orthopaedic referrals should be seen in community settings of care



NHS RightCare identified an above-expected number of injuries and admissions due to falls in people over 65, particularly where this involves delayed discharges following admission for hip fragility fractures. There are also above expected emergency readmissions with 28 days of elective and non-elective orthopaedic surgery. The CCG and providers are working to improve discharge planning pre-operatively for *non-elective admissions*; and improve post-operative community rehabilitation and support for *elective admissions*

The voice: What do local people think about Musculoskeletal Services?

Healthwatch Ealing surveyed people attending community musculoskeletal services in January 2018

- 40 people attending community physiotherapy and interface services at Ealing Hospital, Clayponds Hospital and Ealing Day Treatment Care Centre were surveyed about their experiences

What do people think about community musculoskeletal services?

- Overall, 73% of people had a positive experience, and 87% said they were likely or extremely likely to recommend the service to friends and family
- The highlights were: the quality of treatment and care received, staff attitudes towards the client, and the quality of the explanation about their treatment
- The convenience of the appointment attended was also highly rated as well as the ease of gaining an appointment, although getting through on the telephone was rated more difficult

"I like the service here, this being my fourth visit and now I feel much better. I could not walk at first, now I can, there is a massive improvement", "We were referred by my GP and we waited for 12 weeks and we were told that [this is] the time we [would] have to wait to see a physiotherapist. This is my second visit and the last time I was here it was good. He explained everything well."

- 18% of people reported that the waiting times for treatment were too long, and this was reflected in a lower rating for waiting times.
- Given the long waiting times, this proportion of complaints reflects well on both the service and referrers, who provided advice to people whilst waiting and managed their expectations about waiting times
- Other concerns raised include not enough time for consultations or supervised exercise, and long gaps between appointments

London North West University Healthcare NHS Trust undertook patients satisfaction surveys in 2016-17

- 99.6% of patients reported their overall care in the physiotherapy service was good or excellent
- 97% of patients were satisfied with their care in the interface service

"Lovely to have the time to explain my condition to me, and for me to ask questions", "Thorough and comprehensive treatment. Couldn't think of anything which could have been improved. Definitely best physio I ever had. Many thanks."

London North West University Healthcare NHS Trust reported an analysis of complaints at a service review in May 2017

- Formal complaints from service users were low: 12-15 complaints per year
- The main themes reflect the referrer not managing patient expectations about the referral. As a consequence, these patients were expecting massage rather than exercise-based therapies, and to inappropriately have MRI scans to diagnose their symptoms
- There were also complaints about the waiting times

London North West University Healthcare NHS Trust reported Patient Reported Outcome Measures (PROMS) in 2017

- 98% of patients receiving physiotherapy showed a significant improvement in function and 96% showed a significant improvement in symptoms using the Measure Yourself Medical Outcome Profile (MYMOP) score
- 80% of patients seen in the interface service significantly improved their MYMOP score. A lower percentage improvement would be expected in the interface service as this includes patients who have failed to progress with initial management, so their scope for improvement is smaller

Gaps and unmet needs

Musculoskeletal Health

All Prevention Domains

Support for self-care and prevention

Increase physical activity at all ages

Reduce obesity

Ensure planning for increased demand for musculoskeletal services (including joint replacements) due to longevity and rising obesity

Primary Prevention

Reduce smoking prevalence

Provide Making Every Contact Count (MECC) to maximise support for population behaviour change

Provide nutritional advice in antenatal period and in the elderly

Secondary Prevention

Provide a falls prevention programme to reduce ambulance callouts and admissions in the elderly

Provide a fracture liaison service for secondary prevention of fragility fractures

Reduce unwarranted variation in GP referrals to community and secondary care services

Tertiary Prevention

Provide a community-based chronic pain service offering a combined physical and psychological approach

Improve links between NHS and return to work schemes to reduce the disability employment gap

Improve efficiency and cost effectiveness of community musculoskeletal services to reduce non-take up rates and reduce waiting times

Integrate physical therapies, mental health services (IAPT) and chronic pain services

Increase patients seen in primary and community services rather than hospital outpatients, where clinically appropriate

Provide early supported discharge for elective and non-elective orthopaedic admissions

Recommendations for commissioners

Musculoskeletal Health

High Priority Recommendations

Action by

1. Increase physical activity at all ages	<i>Local Authority</i>
2. Reduce childhood and young persons' obesity	<i>Local Authority</i>
3. Provide a falls prevention programme to reduce ambulance callouts, A&E attendances and admissions for falls in the elderly	<i>Local Authority & Ealing CCG</i>
4. Provide a Fracture Liaison Service for secondary prevention of fragility fractures	<i>Ealing CCG</i>
5. Provide a community-based chronic pain service, offering a physical and psychological approach to pain management	<i>Ealing CCG</i>
6. Integrate community mental health services (IAPT) with physical therapies and chronic pain services	<i>Ealing CCG</i>
7. Increase musculoskeletal conditions managed in primary and community care settings rather than hospital outpatients, where clinically appropriate by improving clinical integration	<i>Ealing CCG</i>
8. Provide staff training to support behaviour change (Making Every Contact Count – MECC), patient activation and shared decision making	<i>Local Authority & Ealing CCG</i>

The general principles for developing interventions and services for improving musculoskeletal health are:

- Keep the person or patient as the guiding principle at the centre of decision-making
- Use a life course approach to health prevention and local authority strategies
- Consider the high level of co-morbidity of musculoskeletal disorders with other conditions, and that interventions such as increasing activity levels, reducing smoking prevalence and improving nutrition, as well as providing effective treatment for musculoskeletal conditions will benefit the co-morbidities too
- Consider how to engage particular groups with interventions to improve musculoskeletal health and reduce health inequalities
- Further recommendations and details are in the full version of the JSNA:

<http://www.ealingccg.nhs.uk/media/136122/ealing-jsna-musculoskeletal-health-in-ealing-pre-publication-2017-12-15.pdf>

Further information

Musculoskeletal Health

Key local documents (Accessed 27.12.17)

- Ealing Joint Strategic Needs Assessment: Musculoskeletal Health in Ealing 2017. LB Ealing and Ealing CCG. Bernstein I. et al. <http://www.ealingccg.nhs.uk/media/136122/ealing-jsna-musculoskeletal-health-in-ealing-pre-publication-2017-12-15.pdf>
- North West London Collaboration of Clinical Commissioning Groups. *STP October submission 2016, NW London Sustainability and Transformation Plan*. NWL CCS; 2016. <https://www.healthiernorthwestlondon.nhs.uk/documents/sustainability-and-transformation-plans-stp-october-submission-2016>
- London Borough of Ealing. *Corporate Plan 2014-2018*. LBE 2014. https://www.ealing.gov.uk/download/downloads/id/550/corporate_plan_2014-18.pdf
- London Borough of Ealing and NHS Ealing CCG. *Ealing Mental Health and Wellbeing Strategy for Adults, 2017-2022*. LBE & ECCG; 2017. https://www.ealing.gov.uk/download/downloads/id/11233/ealing_mental_health_and_wellbeing_strategy_for_adults_2017_-_2022.pdf
- NHS Ealing CCG and LB Ealing. *Ealing Local Plans: Our five year plan for Ealing residents to be well and live well*. ECCG; 2016. http://www.ealingccg.nhs.uk/media/1848/ealing_ccg_local_plan_working_document_2016.pdf

Resources (Accessed 27.12.17)

- Department of Health. *The Musculoskeletal Services Framework*. London: Department of Health; 2006. http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4138412.pdf
- NHS England. *Transforming musculoskeletal and orthopaedic elective care services*. A handbook for local health and care systems. NHSE; 2017. <https://www.england.nhs.uk/wp-content/uploads/2017/11/msk-orthopaedic-elective-care-handbook-v2.pdf>
- National Institute for Health and Care Excellence. *Return on investment tools - beta versions*. London: NICE; 2016. <https://www.nice.org.uk/about/what-we-do/into-practice/return-on-investment-tools>

Key references (Accessed 27.12.17)

- Arthritis and Musculoskeletal Alliance. *Policy Paper: Prevention of Musculoskeletal Conditions*. London: ARMA; 2017. <http://arma.uk.net/wp-content/uploads/2017/08/Policy-Paper-Prevention-interactive2.pdf>
- Arthritis Research UK. *Musculoskeletal Calculator*. <http://www.arthritisresearchuk.org/arthritis-information/data-and-statistics/musculoskeletal-calculator.aspx>
- Arthritis Research UK. *Musculoskeletal Health. A Public Approach*. Chesterfield: ARUK; 2014. <http://www.arthritisresearchuk.org/~media/Files/Policy%20files/2014/public-health-guide.ashx>
- Arthritis Research UK. *Osteoarthritis in General Practice. Data and perspectives*. Chesterfield: ARUK; 2013. <http://www.arthritisresearchuk.org/arthritis-information/data-and-statistics/~media/EFAEFC432734F3AA5FB1C64329E02D1.ashx>
- Clinical Standards Advisory Group Committee. *Back pain: report of a CSAG committee on back pain*. London: HMSO; 1994.

- Department of Health. *The Government's mandate to NHS England for 2017-18*. DH: London; 2017. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/601188/NHS_Mandate_2017-18_A.pdf
- Department of Work and Pensions. *DWP Quarterly statistical summaries 2017*. Supporting data tables 9 & 12; Aug 2017. <https://www.gov.uk/government/statistics/dwp-statistical-summaries-2017>
- Health and Safety Executive. *LFS - Labour Force Survey - Self-reported work-related ill health and workplace injuries: Index of LFS tables*. Work-related Illness - Type of illness (LFSILLTYP) <http://www.hse.gov.uk/statistics/lfs/lfsilltyp.xlsx> <http://www.hse.gov.uk/statistics/lfs/>
- Health Education England and Public Health England. *Making Every Contact Count*. HEE 2016. <http://www.makingeveryonthehealthpractcount.co.uk/>
- Institute for Health Metrics and Evaluation (IHME). *GBD Compare Data Visualization*. Seattle, WA: IHME, University of Washington; 2016. <http://vizhub.healthdata.org/gbd-compare> (Accessed 25.11.17)
- NHS England. *Demand Management Good Practice Guide Version 1.1*. NHSE; 2016. <https://www.england.nhs.uk/wp-content/uploads/2016/12/demand-mgmt-good-practice-guid.pdf>
- NHS England. *Patient Activation: At the heart of self-care support*. Patient Activation Narrative, NHSE; 2016. <https://www.england.nhs.uk/wp-content/uploads/2016/04/patient-activation-narrative.pdf>
- NHS RightCare and Public Health England. *Commissioning for Value, Where to Look pack, NHS Ealing CCG January 2017*. NHS RightCare; 2017. <https://www.england.nhs.uk/rightcare/wp-content/uploads/sites/40/2017/01/cfv-ealing-jan17.pdf>
- North West London Collaboration of Clinical Commissioning Groups. *Report of the NW London CCGs' collaboration board - July 2017*. Strategy and Transformation Meeting 27 April 2017. NW London CCGs; 2017. <http://www.ealingccg.nhs.uk/media/127632/12-Collaboration-Board-update.pdf>
- Public Health England. *Health Profile 2017, Ealing*. PHE; 2017. <http://fingertipsreports.phe.org.uk/health-profiles/2017/e09000009.pdf>
- Public Health England. *Public Health Profiles, 4.14i - Hip fractures in people aged 65 and over (Persons)*. <https://fingertips.phe.org.uk/search/hip%20fractures#page/1/gid/1/pat/6/par/E12000007/ati/102/are/E09000009>
- Public Health England. *Return on Investment of Interventions for the Prevention and Treatment of Musculoskeletal Conditions. Final Report*. PHE; 2017. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/653736/musculoskeletal_conditions_return_on_investment_final_report.pdf
- Sport England. *Active People Survey Analysis Tool*. <http://activepeople.sportengland.org>

Author

Ian Bernstein, Clinical Lead for Musculoskeletal Services, NHS Ealing CCG ian.bernstein@nhs.net

Acknowledgements

- Peer review and contributions: *Rutuja Kulkarni-Johnston, Consultant in Public Health, LB Ealing*
- Design and layout: Public Health Department, London Borough of Camden
- Public health approach to musculoskeletal health: Arthritis Research UK