7.5.13 Musculoskeletal conditions

Why is this issue important?

The term 'musculoskeletal conditions' encompasses a range of common conditions, including back pain, shoulder pain, elbow pain, hand pain, and hip and knee pain. Musculoskeletal conditions can also limit mobility in older people and make them vulnerable to falls.

In England over 9.6 million adults and around 12,000 children have a musculoskeletal condition. Problems can be non-specific with no simple solution.[1] Recurrence is the norm for most musculoskeletal conditions.

An estimated 11.2 million working days a year are lost through these conditions. It is the second most common reason for receipt of incapacity benefit.[2]

Key outcomes

- ***Enhancing quality of life for people with long-term conditions. (NHS Outcomes Framework)***
- ***Helping people to recover from episodes of ill health or following injury (NHS Outcomes Framework)***
- ***Enhancing quality of life for people with care and support needs. (Adult Social Care Outcomes Framework)***

Impact in Brighton & Hove

Based upon national evidence:

Back pain: in each year 38% of the adult population have low back pain. In Brighton & Hove, this would mean 79,900 people will have back pain in one year.[3]

Upper extremity disorder: One year prevalence ranges from 2.3% to 41%.[2]

Shoulder pain: 16% of adults experience shoulder pain. In Brighton & Hove this would mean 33,600 adults have shoulder pain in one year.[4]

Elbow pain: One year prevalence ranges from 1% to 3%. In Brighton & Hove this would mean 2,600 - 7,800 people had elbow pain in one year.[5]

Hand pain: 12 to 21% of people have hand pain, but in a year most do not consult their GP.[6]

Hip: 5% of the population are estimated to have symptoms of hip disease. In Brighton & Hove this would mean 10,500 people with hip pain in a year.[2]

Knee: 49.5% of over 50s had knee pain in one year, with 60% of over 65s having severe knee pain. In Brighton & Hove this would mean 36,900 people have knee pain in a year of which 18,500 is severe.[7]

Hip and knee replacement surgery is very successful, but there is substantial variation in the kind of hip replacement undertaken (cemented or uncemented) and in other knee surgery i.e. anterior cruciate ligament reconstruction.

Treatment: As described in Section 8.4 of the JSNA Summary (Variations in Healthcare) we have a high rate of therapeutic knee arthroscopy. We also have a low rate of health gain from knee procedures, and from hip replacement,[8] implying that patients are being treated with lesser degree of disability in Brighton & Hove than elsewhere.

In contrast to other South East Coast PCTs and England, the length of stay for hip replacements has increased in Brighton & Hove from seven to 10 days between 2005/06 to 2009/10, and in 2009/10 we had the highest average (median) length of stay for hip replacements in the country.[2] Emergency admissions for hip replacements are usually the result of fractures of the hip joint, often related to falls in the elderly.

In 2009/10 there were approximately 4,200 non-emergency inpatient admissions for musculoskeletal conditions in Brighton & Hove, similar to the England and South East Coast SHA rates.[2]

[1] Kammerling M. Pickin M. Gilchrist K. MSK Needs Assessment. NHS Sussex. October 2011.
[2] Gilchrist K. Musculoskeletal conditions – Sussex rapid needs assessment working draft v4. August 2011.
[3] Kammerling M. Pickin M. Gilchrist K. MSK Needs Assessment. NHS Sussex. October 2011. Appendix 1.
[4] Urwin M, Symmons D, Allison T, Brammah T, Busby H, Roxby M, Simmons A, Williams G. Estimating the burden of musculoskeletal disorders in the community: the comparative prevalence of symptoms at different anatomical sites, and the relation to social deprivation. Ann Rheum Dis; 1998: 57: 649-655.
[5] Allander E. Prevalence, incidence and remission rates of some common rheumatic diseases and syndromes. Scand J Rheumatol 1974; 3:145–153.
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[7] Jinks C; Ong Bie Nio; Richardson J. A mixed methods study to investigate needs assessment for knee pain and disability: [population and individual perspectives. BioMed Central Muskuloskeletal Disorders 2007: 8:59.

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Non-emergency hospital admission rates for musculoskeletal conditions per 1,000 by GP practice population for 2012/13 in Brighton & Hove varied from 4.6 to 35.2, with a mean of 14 per 1,000.

Spend per weighted head of population on musculoskeletal conditions is significantly higher in Brighton & Hove compared with England, and is one of the highest nationally.[8] 96% of this spend is on secondary care. Disease specific expenditure does not include expenditure on prevention, or GP expenditure, but does include prescribing expenditure.

Where we are doing well

Analysis in 2008 indicated there were no inequalities for access to hip and knee replacements within the city.

Local inequalities

The prevalence of musculoskeletal pain rises significantly with increasing social deprivation at all ages, associated with a significant increase in global disability at ages 45-64.[2]

Poor housing and type of employment can influence the site of the musculoskeletal condition. Stress, depression and obesity are also associated with musculoskeletal conditions.[4]

National population studies have shown that many people who would benefit from treatment (e.g. knee and hip replacement surgery) do not always get it and that the most deprived are more likely to miss out even though they are more likely to have musculoskeletal symptoms.[9] Locally, age standardised rates per 100,000 for hip and knees arthroplasty and revisions for 2008/09 and 2010/11 show that the most deprived quintiles have a higher rate of intervention procedures than the less deprived quintile.[10]

Nationally people who are aged 60-84 years receive greater provision for hip and knee replacements relative to need, than those aged 50-59 years or 85 years and over.[8]

Research conducted in Manchester indicated that disability prevalence due to musculoskeletal pain was higher for Indian and Bangladeshi people than white people.[11]

Judge et al (2010) found that in England men received 31% more knee replacements relative to need than women and 8% more hip replacements.[12]

Predicted future need

Increasing longevity, obesity and lack of weight bearing exercise will increase the number of patients with musculoskeletal conditions.[13] Rates of elective joint replacement surgery are predicted to rise by 4.2% annually.[13] Osteoarthritis is impacted by obesity and is projected to increase in the future.[14]

It was estimated in 1999 that demographic changes are likely to increase the national demand for knee replacement by 40% over the next 40 years.[15]

The increase in the older population in Brighton & Hove will increase at a slower rate than the national trend and it is not projected to see a great increase in the next 10 years, so a large rise in the number of older people with musculoskeletal conditions is not predicted.

What we don't know

We do not have any local patient voice on this topic.

We do not know what actions are being taken to promote awareness of the importance of nutrition and physical activity to improve bone health.

[8] Spend and Outcome factsheet: Yorkshire Public Health Observatory. Available at: http://www.yhpho.org.uk/default.aspx?RID=49488 [Accessed on 26/08/2013].

[9] Jinks C; Ong Bie Nio; Richardson J. A mixed methods study to investigate needs assessment for knee pain and disability: [population and individual perspectives. BioMed Central Muskuloskeletal Disorders 2007: 8:59.

[10] Dorling C. Copy of standardization hipsknees quintiles. 2008

[11] Allison T et al. Musculoskeletal pain is more generalised among people from ethnic minorities than among white people in Greater Manchester. Ann Rheum Dis 2002;61:151-156. doi:10.1136/ard.61.2.151 [Accessed September 2009]

[12] Judge A. and Welton NJ, et al. Equity in access to total joint replacement of the hip and knee in England. British medical Journal 2010; 341:c4092 doi:10.1136/bmj.c4092

[13] Department of Health. *The Muskuloskeletal Services Framework – A joint responsibility: doing it differently*. London: Crown Copyright. 2006. Available http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4138413 [Accessed on 26/08/2012].

[14] Foresight. Tackling obesities: future choices – Modeling future trends in obesity and the impact on health. 2nd edition. Government office for science, 2007 [on line] http://www.bis.gov.uk/assets/foresight/docs/obesity/14.pdf

[15] Fear J and Hillman M et al. Prevalence of hip problems in the population aged 55 years and over: access to specialist care and future demand for hip arthroplasty. Br J Rheumatology (in press)

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There is no other data available in relation to protected characteristic groups apart from gender and ethnicity.

Key evidence and policy

NICE has published the following clinical guidance relating to musculoskeletal conditions:

Falls (August 2005 and update 2011)

Osteoporosis (February 2008)

Osteoarthritis (2008)

Rheumatoid arthritis (2009)

Lower back pain (2009)

Hip fractures (2011)

Recommended future local priorities

1. Ensure care pathways maximise the benefits of non-surgical interventions in musculoskeletal conditions, including physiotherapy,
2. Review the criteria for access to surgery to ensure equity of access across the area.
3. Depending on overall financial pressures, consider establishing access criteria which ensure a pre-operative health/disability score more similar to the national average.
4. Review access by areas of deprivation to ensure a similar level of service for similar need.
5. Identify and address reasons for differential use of cemented and uncemented joint replacements.
6. Review evidence base and cost effectiveness of anterior cruciate ligament reconstruction to move to a consistent evidence-based care pathway, consistent with local financial pressures.
7. Review falls prevention activity to ensure maximum benefit from current resources.
8. Review community services and discharge arrangements for hip replacement in Brighton & Hove, to reduce lengths of stay.
9. Ensure the proposed service model changes the ratio of spend in musculoskeletal conditions from secondary to primary care. Review the reasons for high spend in Brighton & Hove.
10. Ensure NICE guidance is utilised to guide service developments.

Key links to other sections

- Healthy weight (adults and older people)
- Disability
- Carers
- Care of the elderly
- Variations in healthcare

Further information

MSK Needs Assessment. NHS Sussex. October 2011. Kammerling M. Pickin M. Gilchrist K.

Last updated

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