1. Summary of findings and recommendations

Main findings – General

1.1 Musculoskeletal disorders (MSKD) are common and their consequences such that half of all disability in the UK can be attributed to their presence. The resulting economic burden is considerable and rising as the population ages. However, relatively little attention is focussed on common MSKD such as osteoarthritis and their consequences. Instead, there is a tendency to regard the resultant disability as an inevitable consequence of ageing for which little can be done.

1.2 Services for those with MSKD conditions are poorly planned. Currently patients with similar Musculoskeletal problems are referred to a range of different hospital services including orthopaedic, pain, rheumatology and therapy services These services may use several different approaches to manage the same clinical problem.

1.3 Services for those with MSKD remain too focused within secondary care and have not kept pace with improvements in community-based rehabilitation. However, both hospital and community services are poorly developed for those with severe disabling MSKD.

1.4 Multidisciplinary teamwork is a cardinal feature of the management of complex Musculoskeletal disability. These teams may embrace specialist nurses and therapists but need both psychological and medical support.

Main findings – specific

Inflammatory arthritis

1.5 Despite the introduction of more effective and better tolerated disease modifying agents for the inflammatory arthritides, these diseases, particularly rheumatoid arthritis (RA), remain major causes of disability and loss of independence.

Osteoarthritis

1.6 Osteoarthritis (OA) is extremely common, and the major cause of pain, physical disability and restricted activities and participation amongst older people. Despite this, access to appropriate interventions such as exercise programmes and provision of simple aids and appliances is patchy.

Joint replacement surgery

1.7 Although joint replacement surgery has revolutionised the lives of many arthritis sufferers, the potential benefits are often constrained by a failure to recognise the effect that such surgery will have on adjacent joints. For example, the strains subjected to upper limbs if these are required to withstand additional loading following lower limb surgery. Discharge from hospital may also be needlessly delayed because a transient increase in dependence has not been anticipated and planned for.

Osteoporosis

1.8 Patients with disabling MSKD are at increased risk of osteoporosis. Reduced mobility is a risk factor for many. Those with inflammatory arthritis or polymyalgia rheumatica may also be taking glucocorticoids.

1.9 There are inadequate facilities for bone densitometry to screen high-risk groups such as those on steroids.

Regional problems and spinal pain

1.10 Spinal problems are a major cause of pain, disability and loss of independence world-wide with major economic implications for western economies. Disabling spinal pain, however, appears to be a feature of caring societies. Pain, which cannot be managed in primary care, is often complicated by physical and psychosocial comorbidity.

Shoulder problems

1.11 Shoulder problems account for 5% of GP consultations. The associated pain and disability due to 'inability to reach' are frequently underestimated.

Soft tissue problems

1.12 Soft tissue problems may also arise in those with joint hypermobility and those who place excessive and/or repetitive mechanical demands on their joints through work or leisure activities. Professional sportsmen and women and musicians are at particular risk of the latter, and indeed may have self-selected for these professions because they are unusually flexible. Those subjecting their limbs to repetitive mechanical loading eg in employment involving repetitive tasks, are an additional group at risk.

Other painful conditions

1.13 Both fibromyalgia and complex regional pain disorder (CRPS) are poorly defined conditions often characterised by intense pain resulting in referral to the secondary sector. They can have a huge impact on functional independence and lifestyle. Currently services are patchy for both conditions and management very variable.

Environmental access

1.14 Poor environmental access in those with MSKD increases vulnerability to a range of other problems:

- injuries through falls
- delayed hospital discharge
- difficulties returning to work, etc.

1.15 Legislation has acted as a spur to change and, for example, public transport and buildings are gradually becoming more accessible to those with mobility problems. However, as indicated in the Audit Commission report 'Better Equipped', statutory providers of relevant equipment such as wheelchairs are usually under-resourced, given low priority and often poorly managed. There are also large regional variations in provision. Information about relevant benefits is complex and often difficult to follow, and those who develop mobility problems over 65 years are specifically excluded from certain benefits (the mobility component of Disability Living Allowance).

Main recommendations – general

1.16 Commissioners of services and local providers should meet to review the overall provision of services for those with MSKD and how they can be provided most cost-effectively. Such reviews will need to focus specifically on the major causes of disability and lost participation eg:

- osteoarthritis
- osteoporosis
- pre and peri-operative care for those needing elective surgery and postoperative rehabilitation
- rheumatoid arthritis and other inflammatory conditions
- soft tissue injuries and chronic disorders
- spinal pain.

Specific recommendations

Osteoarthritis

1.17 Patient education regarding weight reduction and exercise; and the provision of appropriate simple orthoses, aids and appliances may do much to alleviate distress and disability and systems should be in place to ensure all have access to these.

1.18 Joint replacement is an important option for the few people with the most severe forms of OA. As part of their 'overall strategy for the provision of Musculoskeletal services', localities should develop consensus with local stakeholders (including patients), on the indications for referral for primary joint replacement surgery.

Rheumatoid arthritis

1.19 Impact on function, self-efficacy, physical and psychological status and pain should be lessened by a co-ordinated management programme including screening for those at greatest risk of loss of independence and/or employment.

1.20 Rehabilitation services should then be targeted at these groups and include patient education, joint protection training, exercise therapy, and appropriate provision of orthoses, mobility aids and environmental adaptations. Psychological interventions should also be available. Intensive co-ordinated in or day patient rehabilitation should be available for people with active or severe RA.

Joint replacement surgery

1.21 A holistic approach is needed to address the complex issues regarding pre-operative care through to post-operative rehabilitation. They should include a pre-operative assessment, and adequate provision of peri-operative and post-operative therapy. With current trends in sub-specialisation, orthopaedic correction for inflammatory polyarthritis can involve four or five different surgeons. Hence, there is a role for a physician, either rehabilitationist or rheumatologist, to co-ordinate overall management.

1.22 Ideally surgery on individuals with inflammatory joint disease should be based from a rheumatology ward to minimise disruption to disease management and to optimise post-operative rehabilitation.

Osteoporosis

1.23 Adequate bone densitometry should be provided to ensure the screening of all high-risk groups.

1.24 Osteoporosis and fracture services should work together to ensure high risk groups presenting with fractures are appropriately screened and osteoporosis treatment initiated when indicated.

1.25 Other secondary health problems associated with poor mobility such as thrombo-embolic disease and pressure sores need to be considered and appropriate preventative strategies introduced. A combination of poor mobility and cultural factors in South Asian women may also make this population particularly vulnerable to osteomalacia and increased risk of fractures.

Regional problems and spinal pain

1.26 Patients with 'red flags' denoting risk of serious underlying pathology should be given prompt access to appropriate investigations.

1.27 Orthopaedic, pain, rehabilitation (therapy) and rheumatology services within a locality should work together to facilitate appropriate triage into relevant services for those not managed in primary care.

1.28 Those with acute spinal pain need adequate pain relief and advice to keep as active as possible. For those with subacute or chronic pain, rehabilitation should include postural re-education, a graded exercise programme, and access to psychological interventions including cognitive behavioural therapy and vocational rehabilitation.

Shoulder problems

1.29 Patients with complete rotator cuff tears or other significant underlying (rheumatological or neurological) problems need referral for investigation and/or surgery. There is little evidence to guide choice of treatment for the remainder. Some 40-50% have persistent pain and disability. In particular, aspects of personal care may be hampered. These aspects require early recognition and intervention, if necessary with aids as well as home and/or workplace adaptations.

1.30 Commonest sites of soft tissue injury are the ankle (5,000 per day in UK), and neck (nearly 700 per day). Whilst spontaneous recovery is to be expected in the majority of cases, a minority will have persistent or recurrent problems leading to pain and disability often affecting work and lifestyle.

1.31 After initial triage to identify those who may require immobilisation or surgical repair, PRICE (protection, rest, ice, compression, and elevation) should be used for the first 72 hours to alleviate early inflammation. This needs to be followed by a carefully co-ordinated programme of rehabilitation, which encourages mobilisation and addresses risk factors (eg vulnerability to falls in the elderly), thus reducing the likelihood of chronicity.

Soft tissue problems

1.32 As well as providing symptom relief, physiotherapy (and in some cases orthoses to stabilise unstable joints), the role of rehabilitation is to identify trigger situations and develop strategies to alter/reduce mechanical demands. This will usually involve task observation. Psychological factors and concerns, which might impede recovery eg impact on income, will also need to be considered.

Other painful conditions

1.33 In both fibromyalgia and CRPS, the severity of the disabling pain needs to be acknowledged and factors likely to interfere with symptom resolution eg compensation claims for prior injuries in CRPS, need to be identified and addressed.

1.34 In CRPS, strategies to alleviate pain are seldom effective long-term, but the use of local treatments eg regional nerve blocks, protective and/or off-loading orthoses, may facilitate

commencing rehabilitation. Cognitive behavioural therapy (CBT) combined with rehabilitation to promote independence and return to normal lifestyle are the mainstays of treatment.

1.35 For fibromyalgia, initial management should include patient education supplemented by physiotherapy, particularly graded aerobic exercise programmes, but CBT again plays a crucial role.

1.36 Local agreement needs to be reached about appropriate care pathways for these patients. These are conditions where success is probably more dependent on the interest and commitment of treating clinicians than their professional background and speciality. Pain management requires a multidisciplinary team using biopsychosocial models of care.

Environmental access factors

1.37 Rehabilitation services have a responsibility to ensure that those who require equipment and/or environmental adaptations to facilitate environmental access receive appropriate advice and provision. Disabled Living Centres and a number of voluntary organisations are useful sources of information.

1.38 Those with deteriorating conditions eg severe disabling RA, need regular review to ensure adequate community support for their changing needs. Assistive technology (powered wheelchairs or environmental control units) may greatly facilitate independence and quality of life for those needing them.

The future?

1.39 The impact of MSKD on lifestyle cannot be lessened by the introduction of new medicines and surgical techniques alone. Developments also need to focus on the following areas:

- Public health interventions to reduce the future risks of developing MSKD (eg obesity, occupational factors).
- Better understanding of the risk factors for longer-term disability with clear routes for early the early assessment and intervention for those with severe progressive conditions or severe pain in particular.
- Rigorous evaluation of rehabilitation interventions, such that resources can be focused on giving the most effective treatments to those who will derive the most benefit.
- Better training for all clinicians working in this area. Training programmes should be developed via close collaboration between all the relevant professional groups and specialities.
- Better use of information systems and technologies and better design of public buildings and private housing to promote independence and self-respect.