MUSCULOSKELETAL GUIDELINES

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BURDEN OF DISEASE

Musculoskeletal diseases are a major healthcare burden in the UK: they account for 20% of consultations in primary care and more than eight million adults suffer from longterm health problems associated with these conditions. They range from common conditions such as osteoarthritis, back pain, osteoporosis and rheumatoid arthritis to uncommon connective tissue diseases such as systemic lupus erythematosus. They are the commonest cause of physical disability and are the second most common cause of days off work in men and women with an annual cost to the NHS exceeding £5.5 billion. With higher public expectations and the ageing population they pose a major challenge not only to the healthcare professionals involved in their care, but also to those involved in the funding of the medical, surgical and physical therapies which are aimed at reducing the burden of pain and disability.

LOCAL SERVICES

The majority of musculoskeletal conditions are appropriately managed in primary care but increasing referrals are made to orthopaedic and rheumatology services to benefit from the major advances that have taken place with joint replacement surgery and medical management respectively. The advances in medical care include effective means of diagnosing, preventing and treating osteoporosis and disease-modifying treatment that limits the progression of inflammatory joint disease. The newer biologic therapies are showing great promise in revolutionising the management of rheumatoid arthritis and allied inflammatory arthropathies, and have the potential significantly to reduce the number of surgical procedures required for these patients.

In the light of these advances the established close collaboration and cooperation between medical and surgical services is essential to further develop local musculoskeletal services for the benefit of patients.

A local initiative undertaken in 1996 confirmed that many patients originally referred for an orthopaedic opinion who did not require surgery could more appropriately be seen by the rheumatology department⁽¹⁾. An initiative in Bristol between orthopaedic and physiotherapy departments also confirmed that physiotherapists working in conjunction with a musculoskeletal team could also appropriately see patients who had originally been referred to orthopaedics⁽²⁾.

With increasing referrals for surgery and the pressure to reduce waiting times for both outpatient appointments and surgical waiting times, new ways need to be explored to maximise the efficiency of the local services.

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These guidelines have been developed under the auspices of the Morecambe Bay musculoskeletal commissioning group and the National Booked Admissions Programme. The

commissioning group was established as an initiative between the trust, PCT, primary and secondary care and allied health professionals as a multidisciplinary group to investigate the complexities of musculoskeletal care provision and provide an improved and integrated service for patients. The group is committed to providing an integrated musculoskeletal services for Morecambe Bay with the ambition that the specialities involved work more closely together with agreed guidelines and an improved internal referral system to enhance patient throughput. The group's vision is that patients with musculoskeletal conditions would be seen by the right specialist in the right place at the right time and receive the most appropriate treatment and follow-up. Whilst some of the inadequacies of the present system were due to limited resources, other problems were organizational, with suboptimal local care pathways. One of the main challenges of this project was to improve dialogue and collaboration between directorates, trusts and the PCT to develop services for patients with musculoskeletal diseases.

The traditional referral routes for patients with musculoskeletal diseases are from primary care to either physiotherapy or chiropody or to secondary care, as follows:

A deficiency of this system is that it does not allow for appropriate patients to be referred directly from physiotherapy and chiropody to rheumatology and orthopaedics. The referral of these cases back to primary care for re-referral to secondary care causes unnecessary delays, inefficiency and inconvenience to patients.

The aim of the guidelines is to facilitate the referral of appropriate cases between physiotherapy and chiropody and also referral to secondary care as follows:

It is also acknowledged that another deficiency of these guidelines is that the pain management service has not been included in this pathway. It will be essential that when these guidelines are revised this invaluable service for many patients with chronic musculoskeletal diseases is included in the guidelines and pathways.

The guidelines are based on reasonable clinical practice for some of the more common conditions and were approved by

the departments of physiotherapy, rheumatology and orthopaedics and the GP lead clinicians of the then three local PCGs. They are available on the PCT website in the healthcare professionals zone under clinical guidelines (www.mbpct.nhs.uk).

An integral part of these proposals is to enter referrals into a common speciality pool and allocate appointments according to these guidelines, unless an opinion is sought from a specialist with a specific clinical interest and expertise.

GUIDELINES

It is now well established that guidelines for the medical management of patients are part of medical life⁽³⁾. Whilst these guidelines have been agreed by the relevant specialities they are to a considerable degree opinion-based rather than evidence-based and a degree of flexibility needs to be employed as not all patients' conditions will conveniently follow the proposed pathways as the guidelines are not infallible.

The guidelines define which conditions require emergency, urgent and routine referral with a target time for urgent referrals of four weeks. For those conditions where several departments are involved in patient management, a pathway is proposed giving the preferred route between specialities although clinical judgement should apply in some circumstances. Some clinicians will be tempted to follow Churchill's view of statistics and misquote him by saying "the only guidelines I believe are those I have written myself".

Management algorithms have been devised and follow a similar pattern with a description of the clinical area involved, the findings on examination, the probable clinical diagnosis and the management proposals and referral routes between specialities.

For those conditions where local injection therapy is indicated a rheumatology referral would be appropriate from those practices unable to offer patients injection therapy. When appropriate, patients should be offered the patient information literature published by the Arthritis Research Campaign which is available either by post or on www.arc.org.uk.

A management pathway is illustrated by the algorithm for elbow pain.

BOOKED APPOINTMENTS

The NHS plan states "that by the end of 2005 waiting lists for hospital appointments and admissions will be abolished and replaced by booking systems giving all patients choice and convenience".

In response to this plan and in collaboration with the booked admissions programme, the musculoskeletal guidelines have formed the basis of electronic bookings, which are now available for rheumatology and physiotherapy referrals. These fully-booked appointments, made at the time of referral, increase patient choice and satisfaction by giving patients the opportunity to choose when and at what time to attend appointments, and also increase the efficiency of hospital resources. This is in response to the original aim of the commissioning group that patients are seen by the right specialist in the right place and at the right time.

Based on the osteoporosis referral guidelines proposed by the Royal College of Physicians it is also possible electronically to book appointments for bone densitometry using the DEXA scanner.

Algorithm for elbow pain

With the exception of bone densitometry referrals the uptake of this service has been limited with e-bookings equating to only 3% referrals between November 2001 and August 2003. Part of the reason for the reluctance to use this service is the additional time required in primary care to complete the protocols for electronic appointments and the uncertainty of the benefits of using the system. Additionally, there are currently not enough specialities to refer to.

AUDIT

One of the projects undertaken by the action on orthopaedics programme, of which Morecambe Bay was one of the national pilot sites, was to perform an audit of referrals to the rheumatology and orthopaedic departments to determine whether patients were referred to the most appropriate speciality and to evaluate adherence to the musculoskeletal referral guidelines.

The audit period was August 2001-June 2002. Demographic data and diagnostic categories for all new outpatient referrals to orthopaedics and rheumatology were entered onto a proforma by the clinician, indicating whether the referral had been sent to the correct speciality and if not which was the appropriate speciality. The differences were examined between the three hospital sites.

Data was entered into an Excel spreadsheet and 8993 patients who were referred for a musculoskeletal opinion were analysed.

Data were available for 6067 patients (67%): 1441 cases (16%) were seen in rheumatology, and 7552 cases (84%) were seen in orthopaedics. The completion rates of proformas were rheumatology 1309 (91%) and orthopaedics 4758 (67%).

Figure 1 Rheumatology diagnostic groups

Figure 2 Orthopaedic diagnostic groups

KEY IP inflammatory polyarthritis OA osteoarthritis STR soft tissue conditions Spine spinal conditions CTD connective tissue conditions

The diagnostic groups of cases referred to the rheumatology and orthopaedic departments are shown in Figures 1 and 2. The majority of patients referred to rheumatology had an inflammatory polyarthritis and the majority of patients referred to orthopaedics had osteoarthritis. Soft tissue problems accounted for 27% of the orthopaedic workload and 14% of the rheumatology workload, and spinal conditions 11% and 18% of orthopaedic and rheumatology respectively⁽⁴⁾.

Six hundred and thirty referrals (10.4%) were considered by the clinician who saw the patient to have been referred to the inappropriate speciality (11% orthopaedic and 8% of rheumatology referrals).

It was considered that the majority of these cases (380, 60%) should have been referred to physiotherapy. The distribution of the other specialities to which cases should have been referred was rheumatology 117 (19%), podiatry 50 (8%), pain clinic 26 (4%), orthopaedics 12 (2%) and other 28 (7%).

The conclusion of this audit was that 10% of musculoskeletal referrals were made to an inappropriate speciality and that the majority of these cases should have been referred to physiotherapy and rheumatology rather than orthopaedics. This data provides a valuable resource to assist in the planning, resource distribution and development of an integrated musculoskeletal service in the future.

An integral component of this development is a programme of continuing medical education between primary and secondary care and allied health professionals. This programme has been commenced at the trust's three education centres and has been well supported by all these professional groups.

CONCLUSION

The development of musculoskeletal guidelines have been a means of improving patient management in both primary and secondary care and have been instrumental in the establishment of electronic bookings for rheumatology outpatient appointments. This work has received some national recognition and has been reported as being an example of good innovative practice by the Arthritis and Musculoskeletal Alliance in their recent response to the Department of Health's national consultation "Fair for all – Personal to you".

This work would not have been possible without the support of the musculoskeletal commissioning group. The success of the group in introducing these guidelines and with other successful collaborative initiatives has confirmed that a clinically-focused multidisciplinary group supported by interested and capable administrators and backed by the trust board can make a series of changes to the system between directorates and providers across the whole health economy. This could have a significant impact on the local provision of musculoskeletal services.

There is, however, considerable concern that the current short-term target culture works against systematic redesign and modernisation of services, which is detrimental not only to musculoskeletal patients but to all patients in general.

The possibility of developing musculoskeletal services further needs to be explored, to ensure that there are the means for effective communication and collaboration between the directorates and trusts involved in the care of this group of patients, who represent the single largest cause of physical disability in the UK.

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