CHAPTER 1

Delivering Musculoskeletal Care Across Boundaries

Samantha L. Hider¹,², Simon Somerville¹ and Kay Stevenson¹,²

¹Arthritis Research UK Primary Care Centre, Keele University, Keele, UK
²Haywood Hospital, Burslem, UK

Introduction

The ever-increasing demand upon acute hospitals to deliver emergency medicine means that the management of long-term chronic conditions is being delivered in a number of different settings rather than the traditional acute hospital. This chapter discusses different ways of working to try to ensure that patients with musculoskeletal conditions receive timely, appropriate treatments with the ‘right person, right place and right time’.

One way of transferring rheumatological expertise to the community, without increasing the burden on the primary care team, is to develop the roles of the wider multidisciplinary team such as nurses, physiotherapists and occupational therapists. Such practitioners, working in an extended role, operate at a high level of clinical practice and cross traditional professional boundaries. This is particularly evident within musculoskeletal interface services.

OVERVIEW

- The burden of musculoskeletal disease is increasing and the importance of a multidisciplinary care pathway in the management of these patients is well established.
- A community-wide approach encompassing the involvement and education of both patient and primary care physician will lead to earlier diagnosis, speedier and more appropriate secondary care referrals, and quicker treatment and ultimately improved clinical outcomes.
- Innovative models of care have been developed within primary/secondary care interface services for patients with musculoskeletal disease.
- Identifying patients with inflammatory arthritis for rapid secondary care referral remains a key challenge for primary care.

Rheumatology in the community: the impact on primary care

Musculoskeletal problems are common in primary care, representing about 20% of all consultations, although these disorders often are not given the same priority as conditions such as cancer or cardiovascular disease. More years are lived with a musculoskeletal disability than any other condition. These patients often have other co-morbidities such as depression and cardiovascular disease. Increasing life expectancy and risk factors such as obesity mean that larger numbers of patients with musculoskeletal problems will require help from health and social services in the future. The challenge is to fill gaps and improve co-ordination of care within existing resources.

Who should be referred to secondary care?

The GP is often viewed as the gatekeeper to secondary care. A more modern and helpful approach is to consider both vertical (with secondary care) and horizontal integration of care, involving primary care-based agencies such as physiotherapy and social care working together rather than in isolation to deliver individualized care.

Waiting times for new rheumatology appointments vary widely and depend on local resources but also, to some extent, on how clinicians triage referrals from GPs. The majority of patients seen in primary care will have non-inflammatory problems such as osteoarthritis or back pain and most can be managed in primary care with appropriate advice and education or referral to primary care physiotherapy.

Effective triage depends largely upon the information contained in the referral letter. The GP is well placed to give an overall picture of the patient, particularly including psychosocial as well as biomedical issues. Recognizing and dealing with them is known to
improve patient outcomes, reduce costs and increase efficiency. Helpful information to include in a referral letter is given in Box 1.1.

A number of simple tools, such as the STarTBack tool for low back pain (Hill et al., 2011), are starting to be employed in primary care to quickly screen patients to identify which are at low risk of poor outcome and require minimal intervention and which may benefit from onward referral so that matched packages based on need can be implemented. The STarTBack tool is highlighted in Box 1.2.

A key challenge for the GP is how to spot the small number of patients with early inflammatory arthritis who will benefit from early secondary care and prompt treatment with disease-modifying drugs (DMARDs). There are no specific examination or investigation findings that are diagnostic for rheumatoid arthritis (RA). Normal blood test results or a negative rheumatoid factor do not rule out RA but a positive test is not diagnostic of it either. Box 1.3 gives some clinical features that may be suggestive of inflammatory arthritis. The recent NICE standards of care emphasize the importance of rapid secondary care referral for all patients suspected of having rheumatoid arthritis (NICE, 2013).

Given that the diagnosis of early inflammatory arthritis can be difficult, it is a good idea to refer too many rather than too few patients. Many rheumatology services operate an interface service or early synovitis clinic so access to early triage and diagnosis is facilitated.

An alternative method when considering secondary care referral, which may be useful in primary care, involves using the ‘red flag’ approach to identify patients with potentially serious pathology. Red flags are highlighted in Box 1.4 and may prompt consideration of further investigation or referral.

Patients with ‘red flags’ and certain other patients with specific diagnoses, including suspected inflammatory arthritis or connective tissue disorders, should be considered for referral to secondary care for further investigation and management. The next step is to decide how best to manage the remainder (the majority) of patients consulting with musculoskeletal problems. Many can be managed in primary care or may be referred to musculoskeletal interface services.

Box 1.1 Important information to include in a referral letter

- Length of history
- Pattern of joint involvement
- The presence of joint swelling and/or stiffness
- Referrals for and response to previous treatments
- Results of investigations
- Distress or disability – results of screening tools such as STarT Back
- Significant co-morbidity and risk factors
- Other medical and psychosocial issues

Box 1.2 The STarTBack tool for back pain

Questions 1–8: tick box for agree/disagree

1. My back pain has spread down my leg(s) at some time in the last 2 weeks
2. I have had pain in the shoulder or neck at some time in the last 2 weeks
3. I have only walked short distances because of my back pain
4. In the last 2 weeks, I have dressed more slowly than usual because of back pain
5. It’s not really safe for a person with a condition like mine to be physically active
6. Worrying thoughts have been going through my mind a lot of the time
7. I feel that my back pain is terrible and it’s never going to get any better
8. In general, I have not enjoyed all the things I used to enjoy
9. Overall, how bothersome has your back pain been in the last 2 weeks? (Not at all/Slightly/Moderately/Very much/Extremely) (score 1 for ‘very much/extremely’) A total score of <3 = low risk, total score ≥4 = medium/high risk. (medium risk = scores from items 5–9 of ≤3, high risk = scores from items 5–9 of 4 or more).

Source: www.keele.ac.uk/sbst

Box 1.3 Features suggestive of inflammatory arthritis

- Stiffness of joints – especially early morning stiffness for >30 minutes.
- Swelling (synovitis) of any joints – especially wrists and/or metacarpophalangeal (MCP) joints and/or proximal interphalangeal (PIP) joints.
- Squeezing the affected joints is painful.

Box 1.4 ‘Red flags’ for regional pain syndromes

History of significant trauma
- Fracture
- Major soft tissue injury
Localized joint injury and/or redness
- Septic arthritis
- Inflammatory arthritis
- Haemarthrosis
Unremitting night pain
- Malignancy
- Inflammation/infection
Bone tenderness
- Fracture
- Malignancy
- Infection
Systemic disturbance
- Weight loss
- Fever
Significant co-morbidity
- Previous malignancy
**Musculoskeletal interface services**

These services have been established across the UK and designed and commissioned in a range of formats, varying from physiotherapy-led services to those where expertise is gained from a variety of professional backgrounds including physiotherapy, GP and rheumatology. The aim of these services is to improve the management of patients with musculoskeletal pain problems whilst reducing the numbers of patients referred to secondary care. Common to most models is the notion that patients will be seen quickly, assessed, investigated and managed in a ‘one stop shop’ approach, with minimal follow-up.

Commissioned services vary depending on their population needs. Initially, services were commissioned assuming that most patients would have a single site of pain, with a short duration and would require appropriate assessment but minimal intervention. However, a recent study of interface clinic consulters (Roddy et al., 2013) identified that over half of those presenting had pain for more than 1 year, and co-existent anxiety and depression and work disability were common, highlighting that these patients have more complex physical and psychological needs than anticipated. Clinicians who work in the interface setting need to have a broad range of skills to assess and manage these patients. They need to be able to assess single joint disease but also be able to spot those with serious pathology or inflammatory arthritis and refer accordingly. They also need to understand the surgical thresholds for appropriate referral where indicated.

Physiotherapists with extended skills have been a consistent feature in interface services. These highly trained clinicians have additional skills in differential diagnosis, clinical assessment, and prescribing or injection therapy. They bring their knowledge of physical rehabilitation, pain management and motivation to such services. Designs of these services vary, but an effective interface service should draw on the skills of the multidisciplinary workforce and maximize the skills of the clinicians involved to address the broad range of conditions. Individual clinicians may not treat depression, anxiety, low mood or poor exercise tolerance, but they need to know how to spot them and who/where to refer on to for further input. Box 1.5 highlights key factors for a successful interface service.

**Box 1.5 Key factors for a successful interface service**

- Multidisciplinary
- Strong clinical leadership and governance framework
- Competency based
- Education and research embedded in practice

**Further management**

The large numbers of patients and the burden of musculoskeletal disease require a more planned and co-ordinated approach, as is used in other long-term conditions such as diabetes. Many patients with musculoskeletal disease have additional co-morbidity or are at higher risk of vascular disease such as those with rheumatoid arthritis or gout. Screening for vascular risk factors such as hypertension, diabetes and hyperlipidaemia is key as they are often not optimally managed within this population.

Within primary care, there is a vital role to be played by practice and district nurses who are well placed to lead on these issues. This includes holistic assessment, supplying advice and education, provision of treatments, appropriate referrals and, most importantly, overall care co-ordination.

For patients managed within secondary care, the shared management of (often multiple) disease-modifying drugs and co-morbidity is increasingly important. Specialist nurses based in secondary care have a key role in helping co-ordinate this care, providing additional expertise and extended role procedures such as joint injection and as a link with hospital consultants.

**Conclusion**

Musculoskeletal problems are extremely common and many can be successfully managed in primary care. Screening tools such as those for red flags or STarTBack can be useful to identify patients most likely to benefit from onward referral or additional interventions. Prompt referral to secondary care for patients with suspected inflammatory arthritis is key to allow rapid institution of disease-modifying agents shown to improve prognosis. Co-ordination of care between primary and secondary care teams is important in providing ongoing effective management of musculoskeletal disease and its common associated co-morbidities.

**References**


