

MS16 Musculoskeletal and sports medicine contextual unit



### Rationale

Musculoskeletal conditions are responsible for a major burden in the Australian health system, affecting around 28% of the population – more than six million Australians. These conditions consume enormous healthcare and social resources, with \$5.7 billion spent on arthritis and other musculoskeletal conditions in 2008–09.<sup>1</sup>

Competitive sport holds a prominent place in the Australian psyche and recreational physical activity is a key strategy in promoting healthy lifestyles and preventive medicine.<sup>2</sup> General practitioners (GPs) are in a good position to promote exercise to their patients to prevent or manage chronic disease (particularly obesity, hypertension, ischaemic heart disease, impaired glucose tolerance/metabolic syndrome and type 2 diabetes, cancer, fall prevention in the elderly, and mental health, including depression, anxiety and premenstrual dysphoria syndrome). A quality general practice therapeutic relationship is a key place to educate individuals as to these benefits and any potential risks (eg overuse injuries, over-exercise in individuals with body image disorders) of exercise.

The assessment and management of musculoskeletal conditions and sporting injuries is a significant part of the workload of general practice.<sup>3</sup> In Bettering the Evaluation and Care of Health (BEACH) data from April 2010 to March 2011, sprains and strains were managed at a rate of 14 per 1000 encounters, suggesting an average 1.7 million sprain/strain patient–doctor encounters nationally per year.<sup>4</sup> Musculoskeletal conditions accounted for 14.4% of general practice encounters in 2013–2014, and were the third most common reason for presentation. Back complaints accounted for 3.0% of reasons for presentation, followed by knee (1.2%), foot/toe (1.0%), shoulder (1.1%), neck (0.7%), leg (0.9%) and other (0.9%) complaints.<sup>5</sup> Musculoskeletal disorders are a significant burden for Australian children, with almost one million problems managed a year in primary care.<sup>5</sup> It is important to recognise that children and young people can also be affected by chronic musculoskeletal conditions, such as juvenile rheumatoid arthritis.

The nature of general practice means it provides the opportunity for early screening for chronic musculoskeletal diseases and enables preventable risk factors to be addressed early. The impact of musculoskeletal conditions on quality of life is large – they are the most common cause of severe long-term pain and physical disability, and are a major cause of work limitation, early retirement<sup>6</sup> and reduced self-perceived state of health. The independent living of a large proportion of people with arthritis and musculoskeletal conditions is compromised, and many people experience psychosocial changes in their lives, such as impacts on marital status, as a result of their arthritis or musculoskeletal disease or condition.<sup>7</sup>

Back pain, joint disorders (osteoarthritis and rheumatoid arthritis) and osteoporosis make the greatest contribution to this burden and constitute one of the nine current National Health Priority Areas (NHPA).<sup>8</sup> Low back pain rates as the number one cause of disability in terms of adjusted life years (disease burden measure). Neck pain rated ninth and osteoarthritis twenty-third, making musculoskeletal conditions very common causes of disease burden in Australian primary care.<sup>9</sup>

The successful management of musculoskeletal conditions requires a holistic and patient-centred approach. A common misconception is that chronic musculoskeletal conditions are inevitable and an unavoidable consequence of ageing. This misconception may lead to missed opportunities to address potentially modifiable risk factors, prevent or slow progression, improve management and optimise health-related quality of life.

General practice plays an important role within the Australian healthcare system in the prevention, early detection and management of chronic musculoskeletal diseases. The burden of arthritis and other musculoskeletal conditions can be reduced through intervention at various points along the disease continuum, including prevention, early diagnosis, prompt initiation of treatment, ongoing management and timely access to surgical interventions such as joint replacement. Some good examples of the importance of early intervention include the following:

- In rheumatoid arthritis, early diagnosis and intervention greatly reduces long-term joint damage and improves outcomes. GPs need to be able to diagnose rheumatoid arthritis as early as possible in order to optimise outcomes for patients.<sup>10,11</sup>
- Up to 18% of women and 10% of men aged over 65 years have symptomatic osteoarthritis characterised by joint pain and mobility impairment.<sup>6</sup> Early recognition of risk factors such as obesity, comprehensive assessment leading to an early diagnosis, and appropriate intervention can significantly relieve signs and symptoms and expedite joint replacement when required.<sup>12</sup>
- Half of all women and a third of all men will suffer minimal trauma fractures secondary to osteoporosis. Early identification and management can prevent many of the longer term, disastrous consequences.<sup>6</sup>

Every GP should develop skills in taking a history specific for musculoskeletal conditions. This may include the mechanism and chronicity of an injury, and eliciting biomechanical, sport-specific, nutritional or psychological contributing factors that might suggest an increased risk of progression to long-term disability and pain. It is important to develop and convey an understanding of the consequences of the injury for the patient, and a prognosis regarding the patient's future function, including impacts on employment and sporting activities.

The study and practice of sports medicine is a rapidly growing area of medicine, with athletes and recreational sports participants now expecting a high standard of care, which has had a direct impact on the practice of sports medicine by GPs. A GP's duty of care to athletes, particularly elite athletes, includes understanding the regulations regarding use of drugs in sport, as well as understanding the potential that the most appropriate general practice management plan for an athlete may conflict with pressures from coaches, sporting clubs, media, and internal pressures self-imposed by the athlete. As is the case with any patient, it is important to uphold confidentiality and consider any risks to team members, such as those due to infectious diseases.

A comprehensive management plan for musculoskeletal complaints may incorporate, where appropriate, medications, patient education and reassurance, therapeutic exercise, rehabilitation, manual therapy, therapeutic injection techniques, acupuncture, dry needling, and psychological and surgical interventions.

Through both direct intervention and promotion of self-management strategies, the GP has a critical role in the management of sports injuries and other musculoskeletal conditions. Musculoskeletal conditions continue to increase in incidence and prevalence with our ageing population with associated increased burden of chronic conditions, largely secondary to obesity and lifestyle choices. GPs are well situated to provide holistic care in these areas, as well as to provide early intervention, avoid fragmentation of management and thus optimise outcomes for these conditions, which have a significant impact on our population.

## Related contextual units

PM16 Pain management

#### References

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- 12. The Royal Australian College of General Practitioners. Guideline for the non-surgical management of hip and knee osteoarthritis. South Melbourne, Vic: RACGP, 2009. Available at www.racgp.org.au/guidelines/osteoarthritis [Accessed 19 November 2015].

# Useful musculoskeletal and sports medicine resources and tools

Australasian Faculty of Musculoskeletal Medicine (AFMM), www.afmm.com.au

Australian Association of Musculoskeletal Medicine (AAMM), www.aamm.org.au

Australian College of Physical Medicine, www.physicalmedicineaustralia.com.au

Chehade MJ, Bachorski A. Development of the Australian Core Competencies in Musculoskeletal Basic and Clinical Science project – Phase 1. Med J Aust 2008;189(3):162–65.

The Royal Australian College of General Practitioners (RACGP), *Clinical guidelines for musculoskeletal diseases (OA, RA, JIA, OP)*, www.racgp.org.au/your-practice/guidelines/musculoskeletal

Sports Doctors Australia, www.sportsdoctors.com.au

Sports Medicine Australia, www.sma.org.au

#### Glossary

Nil

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