

ELECTIVE (SSC5c) REPORT (1200 words)

A report that addresses the above four objectives should be written below. Your Elective supervisor will assess this.

Fourteen million Australians are overweight, and 5 million are obese. Obesity has overtaken smoking as the leading cause of premature death and illness and is now a large threat to the public health future of the country. Interestingly Aboriginal Australians are 1.9 times more likely to be obese than non indigenous Australians. The effect of obesity is having a significant effect on the Australian health system, with increased rates of type 2 diabetes, cardiovascular disease and chronic kidney disease. Current physical activity guidelines recommend 150-300 minutes of moderate physical activity a week. Less than 60% of Australian adults meet the recommended guidelines. Sports and exercise medicine should be the center of the public health and intervention drive to tackle the obesity epidemic.

Australia's health system is a mixture of public and private. Medicare is a government funded aspect of Australian healthcare, and my understanding is General Practitioners can prescribe/refer patients to exercise physiologists as an intervention if deemed necessary. Under Medicare patients can have up to 5 sessions with an exercise physiologist, and type 2 diabetics can receive up to 8 rebates for such services.

Exercise and sports science Australia, Fitness Australia and Sports Medicine Australia have developed a screening tool kit to identify the patients who are more prone to adverse effects of physical activity which can be extremely useful to set out the most appropriate programme for the individual, which can directly have an effect on likelihood of compliance and participation. Exercise is Medicine Australia have also developed various documents and pieces of information to assist medical and health professionals to advise and educate patients and to refer them appropriately.

Alphington Sports Medicine Clinic is a expert tendinopathy centre and therefore the specialist doctors and physiotherapists are extremely skilled in dealing with the various presentations of chronic tendon disease. As the majority of my experience at the London Independent was observing management of Chronic Achilles Tendinopathy I will focus on this site of tendon disease. At the London independent patients would usually be referred after trying multiple other treatments for a High Volume injection plus structured rehabilitation to the treating radiologist. The structured rehabilitation would comprise of eccentric loading exercises, with a protocol developed based on current evidence. This provided a platform for me to research the role of ultrasound guided high volume injections with and without a steroid component. The study found no difference between two groups and practice has now changed with patients being offered a non steroid injection if they prefer. This also helped to increase the understanding behind the injection mechanism, with the belief that a mechanical stripping effect was the treating effect, targeting the neovascularization around the tendon. My understanding is this remains largely a UK based approach.

At Alphington Sports Medicine a conservative approach is rightly taken in these patients, with a initial physiotherapy approach to treatment. Interventions are then considered if physiotherapy fails to improve the patient initially or the patient finds it difficult to partake in the required exercises. Often

at this point patients will be referred on to the doctor to consider further approaches to treatment. Further intervention options that can be considered include extracorporeal shockwave therapy and various injectables. There is no shockwave machine at Alphington and ultrasound guided injections are generally not performed at the clinic either, so patients will be referred on to the appropriate clinic or practitioner. Occasionally patients will receive a blind corticosteroid injection however I did not see this used for treatment of the Achilles.

Sports and exercise medicine training in Australia is a privately funded programme which comprises of a minimum of four years. Specialists completing the training are skilled to work in multidisciplinary teams providing promotion of health through increased use of exercise and physical activity, provide advice on the safe use of physical exercise in both prevention and treatment of illness, and to provide a holistic approach to addressing medical conditions and injuries in individuals who wish to exercise. To enter the programme, the completion of an initial medical qualification with three years approved medical and surgical experience. Individuals who complete the training programme are awarded Fellowship of the Australian College of Sports Physicians. Speaking to the registrars on the programme, it was clear they were enjoying the process, and getting the adequate training they require. They would spend most of the week seeing patients in clinics throughout Melbourne, under the supervision of experience specialists whom they had the opportunity to learn from. They can only spend up to two years at a single practice allowing them to learn from different approaches to treatment in different population groups. At the same time they are actively supported and encouraged to work in various sports to gain a wider experience. They also receive weekly tutorials, including an initial radiology meeting shared with radiologist and general practitioner trainees, followed by more specific teaching for physiotherapists and sports doctors, with sessions have both a lecture and practical component