

### **Appendix 3 (as supplied by the authors): Exercise for hip and knee osteoarthritis (details based on Juhl et al<sup>1</sup>)**

**Rationale for exercise:** A variety of exercise can be performed but exercise to improve muscle strength is a core recommended exercise.

**Provider:** Physiotherapist or exercise professional

**Mode:** Home-based program supplemented by initial face-to-face sessions with a therapist either individually or in a group.<sup>2,3</sup>

**Where:** Home, physiotherapy clinic, gymnasium

**Materials needed:** Resistance bands, ankle weights, or gym equipment

**Procedure:** Approximately 6 muscle strengthening exercises are to be performed for major lower limb muscles (quadriceps, hamstrings, calf, hip abductors, hip extensors) but concentrating on quadriceps muscle strengthening. Instructions and photos are available at: <http://www.racgp.org.au/your-practice/guidelines/handi/interventions/musculoskeletal/exercise-for-knee-osteoarthritis/>

**Number of exercise sessions:** 24-36 sessions; optimal effects if  $\geq 12$  supervised sessions

**Schedule details:** 3 or more sessions per week for 8-12 weeks

**Duration and intensity of each session:** Each session about 30-60 minutes. 8-15 repetitions x 2-3 sets of each exercise. Similar pain and function benefits from both low and high intensity exercise.

#### **References**

1. Juhl C, Christensen R, Roos EM, et al. Impact of exercise type and dose on pain and disability in knee osteoarthritis: a systematic review and meta-regression analysis of randomized controlled trials. *Arthritis Rheumatol* 2014;66:622-36.
2. Fransen M, McConnell S, Harmer AR, et al. Exercise for osteoarthritis of the knee. *Cochrane Database Syst Rev* 2015;1:CD004376.
3. Fransen M, McConnell S, Hernandez-Molina G, et al. Exercise for osteoarthritis of the hip. *Cochrane Database Syst Rev* 2014;4:CD007912.