

KIESER OSTEOARTHRITIS CARE PLANS



Kieser's Osteoarthritis Care Plans provide a high-quality, multi-disciplinary, out-of-hospital coordinated care pathway for patients with osteoarthritis who may otherwise require surgical intervention in the near future.

Our Care Plans are patient-centred and doctor-prescribed, and are founded on a broad and strong evidence-base to deliver superior patient outcomes.



BACKGROUND

Osteoarthritis (OA) is a chronic, degenerative disease affecting articular joints and is characterized by pain, stiffness and a loss of function. It is one of the most common chronic diseases worldwide, with more than 9% of the Australian population self-reporting they have osteoarthritis (Australian Bureau of Statistics, 2015).

This may well be an underestimation of its prevalence in Australia. A systematic review of the prevalence of osteoarthritis analysed the data and methods of multiple studies, concluding that hip and knee osteoarthritis prevalence is 11% and 24% respectively (Pereira et al. 2011). They noted that the way osteoarthritis is defined and measured affects the estimate. Either way, it is a significant health burden, and places a huge financial strain on the public and private health sectors alike.

SUMMARY OF EVIDENCE

Joint arthroplasty is increasing rapidly in popularity, by at least 40% for total hip replacements (THR) and 70% for total knee replacements (TKR) since 2003 (ACI Musculoskeletal Network, 2012).
Surgical outcomes are mixed, with varying outcomes and a high ‘revision burden’ between 11-18% (Yeung et al., 2010).
As many as 34% of joint replacements may be unnecessary (Riddle et al., 2014).
They have been shown to improve function and pain (Desmeules et al., 2013) and pre-operative exercise has widely been shown to improve post-surgical outcomes (Wright et al., 2016; Ibrahim et al., 2013).
Exercise and education have been shown to provide similar improvements to surgical groups after 12 months, with less serious adverse effects (Skou et al., 2015)
Significantly, up to 74% of participants who complete an exercise program may not progress to surgical intervention (Skou et al., 2015).
In a pilot study of Kieser's Osteoarthritis Care Plan, participants' pain levels reduced by 37%. At the 12-month follow-up, only 13% of participants had undergone surgery. At 3 years, 75% of participants still had not undergone surgery



CARE PLAN SUMMARY

The Kieser Osteoarthritis Care Plans provide a structured, multidisciplinary approach to the care of patients with Osteoarthritis. They provide an opportunity to delay or prevent surgery, as well as to reduce pain, relieve symptoms, and improve function and quality of life.

The Care Plans include an admission assessment, care coordination, physiotherapy, exercise science or exercise physiology, access to the Kieser App, a home exercise program, an education program and a discharge self-management plan. Additional services, including a dietitian, strengthening programs on Kieser's specialised equipment and onward referral to a range of other health services are provided when appropriate.

Objective measurement is a key principle of our Care Plans. Outcome measures taken at the commencement and conclusion of each Care Plan provide insight into each individual's improvement, and help evaluate and improve the overall success and quality of the program.

PATIENT SELECTION

The success of any healthcare pathway is in part determined by the people who participate in it. Specific inclusion and exclusion criteria must be met to participate in Kieser’s Care Plans. This helps ensure that the most appropriate patients access our Care Plans. The table below outlines our intended population for each condition:

Table 1. Inclusion criteria

CARE PLAN	GENERAL CRITERIA	CLINICAL CRITERIA	NON-CLINICAL CRITERIA
Knee and Hip OA	<ul style="list-style-type: none">Member with eligible coverCommitment to full completion of Care PlanReferral into the Care Plan by a Medical PractitionerCapacity to attend a Kieser facilityCapacity to complete the inherent requirements of the Care Plan	<ul style="list-style-type: none">Medical Practitioner considers that the patient is a likely candidate for joint replacement (hip or knee) surgery within the next three years.Diagnosis of hip or knee OA confirmed by imagingPain 4/10 or greaterAbsence of clinical exclusion criteria	<ul style="list-style-type: none">Willing to consider long-term non-surgical managementNo hip or knee joint replacement surgery booked

OUTCOME MEASURES

Kieser's philosophy places a strong emphasis on the use of objective data to measure outcomes. The following measures are collected for participants in the Osteoarthritis Care Plans.

Table 2. Outcome measures

OUTCOME MEASURES	CLINICAL CRITERIA
Hip Disability & Osteoarthritis Outcome Score (HOOS)	Questionnaire with 40 multiple-choice questions about hip function, in 5 different sections.
Knee Injury & Osteoarthritis Outcome Score (KOOS)	Questionnaire with 42 multiple-choice questions about knee function, in 5 different sections.
Visual Analog Scale (VAS) for pain	A scale of 0 – 10 on which the patient rates the level of their pain.
Strength Tests	Objective strength-testing of relevant muscle groups completed with Kieser's own strength meter on our equipment.
The Consultation and Relational Empathy (CARE) Measure	Questionnaire with 10 questions relating to the patient's experience of empathy during consultations between a clinician and patient.
Customer Satisfaction Survey	A short questionnaire about the patient's satisfaction levels relating to the Care Plan.
Net Promoter Score	A single question that measures the likelihood of patients recommending Kieser's Spinal Care Plan.

WEEKLY STRUCTURE - KIESER OSTEOARTHRITIS CARE PLANS

	PHYSIOTHERAPY		EXERCISE SCIENCE		INDEPENDENT EXERCISE		OTHER
WEEK 1	Physio 1:1 Initial Assessment	1 hr					
WEEK 2	Physio 1:1	30 mins	Ex Science 1:1 x 2	30 mins	Kieser Membership	Full use of Kieser Facility	
WEEK 3	Physio 1:1	30 mins	Ex Science 1:1 x 2	30 mins	Kieser Membership	Full use of Kieser Facility	
WEEK 4	Physio 1:1	30 mins	Ex Science 1:1 x 2	30 mins	Kieser Membership	Full use of Kieser Facility	Care coord.
WEEK 5					Kieser Membership	Full use of Kieser Facility	Home exercise program
WEEK 6	Physio 1:1	30 mins			Kieser Membership	Full use of Kieser Facility	
WEEK 7					Kieser Membership	Full use of Kieser Facility	Kieser App
WEEK 8					Kieser Membership	Full use of Kieser Facility	Education
WEEK 9			Ex Science 1:1	30 mins	Kieser Membership	Full use of Kieser Facility	Dietitian (if required)
WEEK 10	Physio 1:1	30 mins			Kieser Membership	Full use of Kieser Facility	Onward referral (if required)
WEEK 11					Kieser Membership	Full use of Kieser Facility	
WEEK 12					Kieser Membership	Full use of Kieser Facility	
WEEK 13					Kieser Membership	Full use of Kieser Facility	
WEEK 14	Physio 1:1	30 mins	Ex Science 1:1	30 mins	Kieser Membership	Full use of Kieser Facility	