



The Problem:

Osteoarthritis (OA) is a leading cause of health losses and costs in NZ. The burden of OA is rising as a result of population ageing, rising obesity, increasing injury rates, and earlier onset of disease.

The New Zealand health system, already struggling to meet demand for joint replacement surgeries, will be placed under greater pressure by rising rates of OA.

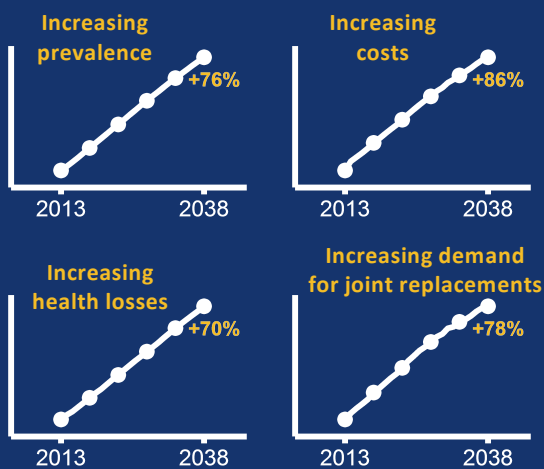
What is known?

- 1✓ Internationally, clinical practice guidelines agree on the optimal core (1st-line) treatment for OA:
 - Exercise therapy and physical activity
 - Weight loss (where appropriate)
 - Patient education and self-management
- 2 Second-line therapies, such as mood and sleep management, topical medications and heat therapy, and walking aids and assistive devices, can be useful adjuncts to core treatment.
- 3 Joint replacement surgery is effective and cost-effective for end-stage OA

- ✗ Recommended core treatments are not routinely reaching New Zealanders with OA.
- ⊘ Many treatments that are not recommended are routinely funded and being delivered excessively. (Opioids, long-term use of anti-inflammatory medications, repeat injections of corticosteroids)
- 1✓ 5-year follow-up of a NZ randomized trial of exercise therapy showed long-term health gains and cost savings compared to usual care, due to reduced demand for other healthcare

Research Findings:

Without changes to current practice, the burden of osteoarthritis will continue to rise



- 📈 Delivering the #1 most-recommended treatment (exercise therapy) would result in large health gains at relatively low cost to the health system (\$25m per year)
- ✓ Delivering all core recommended interventions would result in significant health gains (> 10000 QALYs per year) and would be highly cost-effective.
- 📉 Adequate delivery of core (1st-line) treatments will reduce demand for less cost-effective treatments, reaping potential cost savings for the public healthcare system.
- 📊 Marginal health gains can be achieved by delivering other recommended treatments, at varying costs and net monetary benefits
- 🗣️ Stakeholders (people with OA, healthcare providers, Māori health advocates, healthcare delivery decision-makers and policy-makers, and OA experts) value the recommended treatments.

Policy Options:

1. Deliver the #1 most-recommended treatment (exercise therapy) nationwide
2. Deliver all core 1st-line treatments through coordinated programmes
3. Deliver all of the most cost-effective recommended treatments through coordinated programmes

Marginal cost: Health system perspective

Health Gain:

Net Monetary Benefit:

Marginal cost (Health system perspective)	Health Gain	Net Monetary Benefit
\$25m/year	9000 QALYs/year	\$450m per year
\$150m/year	11000 QALYs/year	\$400m per year
\$140m/year	20000+ QALYs/year	\$1000m per year

Recommendations:

- 1: Deliver the recommended core treatment(s) equitably, nationwide, through coordinated OA management programmes.
- 2: Develop a national Model of Care (MoC) for the management of osteoarthritis
- 3: Remove funding silo barriers that impede delivery of the most recommended treatments within the public healthcare system.
- 4: Establish programmes for de-implementation of wasteful care delivery.