

# MAPping New Zealand Bridging the evidence-practice gap for people with painful musculoskeletal conditions

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# Context

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Musculoskeletal disorders including neck, lower back disorders and arthritis account for 13% of all health loss and is increasing.

Osteoarthritis and back pain are the leading cause of work disability in people aged 15-64

The health system response mainly consists of hip and knee joint replacement surgery; demand exceeds supply

Evidence based pathways mandate physical therapy, education and clinical psychology interventions as first line therapy

Budget 2015: \$50 million over 3 years invested to improve care for people with painful musculoskeletal disorders

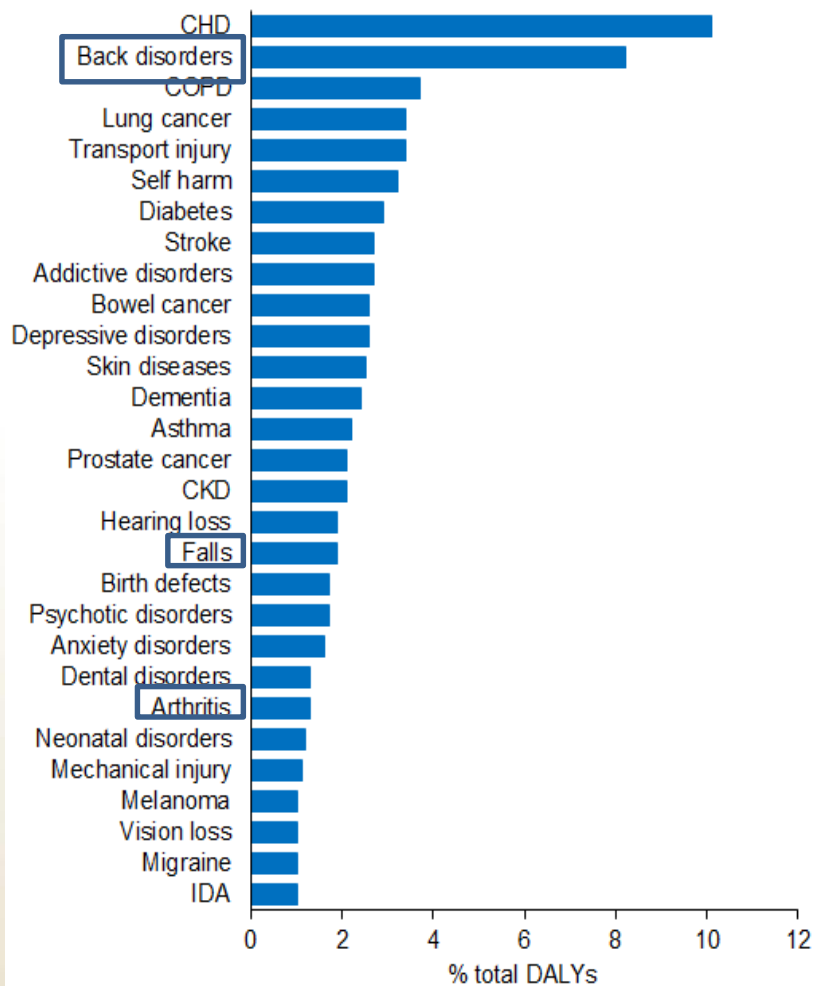
\$6 million for community based rehabilitation

\$44 million for more hip and knee replacements

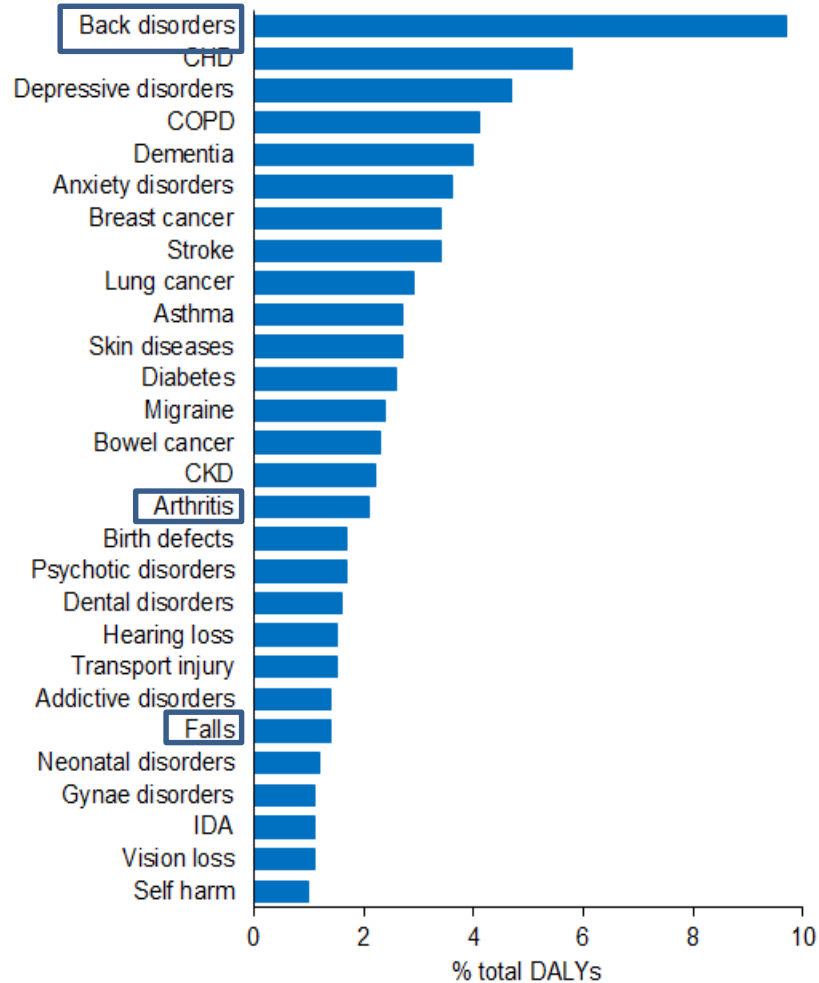
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## Contribution of leading major specific conditions to health loss (% total DALYs), by gender, 2013

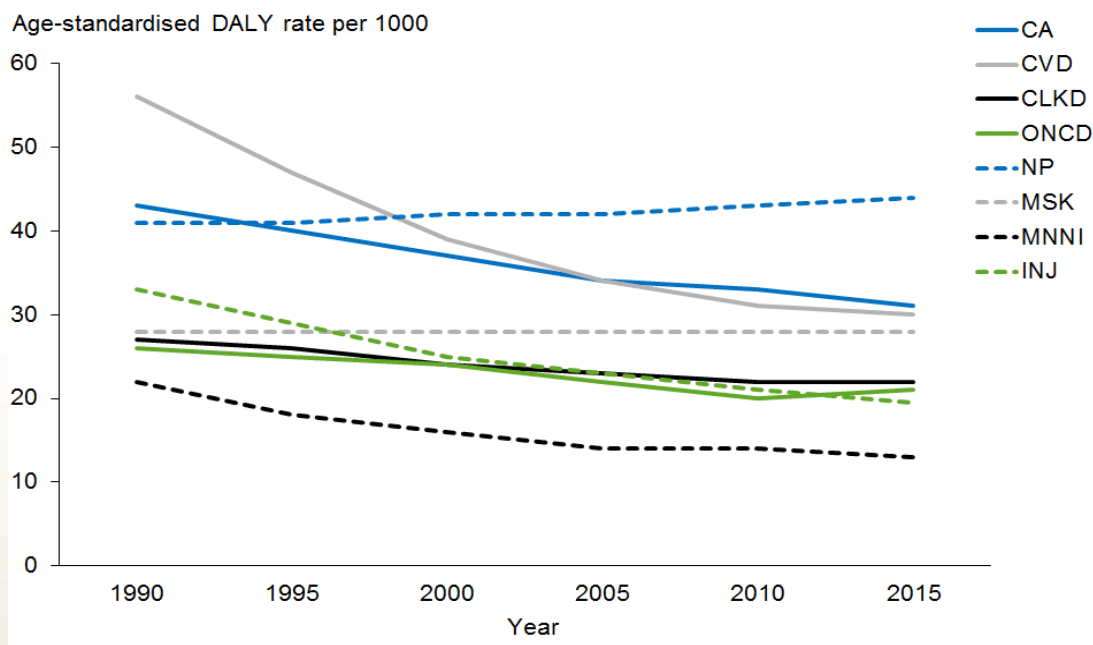
### Males



### Females



# Burden of Neuropsychiatric and Musculoskeletal Disorders is Increasing



# Problem Statement

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## Problems

Despite evidence of effectiveness there is variability in availability of early intervention programmes for people with musculoskeletal disorders

Lack of evidence on how to implement effective and affordable interventions in real-world settings

Increasing demand for elective services (hip and knee joint replacement)

Musculoskeletal conditions the leading cause of early retirement on medical grounds

## Identified by Key Stakeholders

Arthritis NZ, NZ Orthopaedic Association, GreyPower, Primary Healthcare Practitioners

Central agencies (Ministry of Health, ACC, Ministry of Social Development)

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# Issues

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## **Access to publicly funded services**

- Diagnostic and therapeutic services for people with early MSK conditions
- Effective, community based, multidisciplinary rehabilitation and education

## **Equity**

- Inequity of access and outcomes based on funding streams (ACC vs. DHB)
- Inequity of access and outcomes based on ethnicity and deprivation

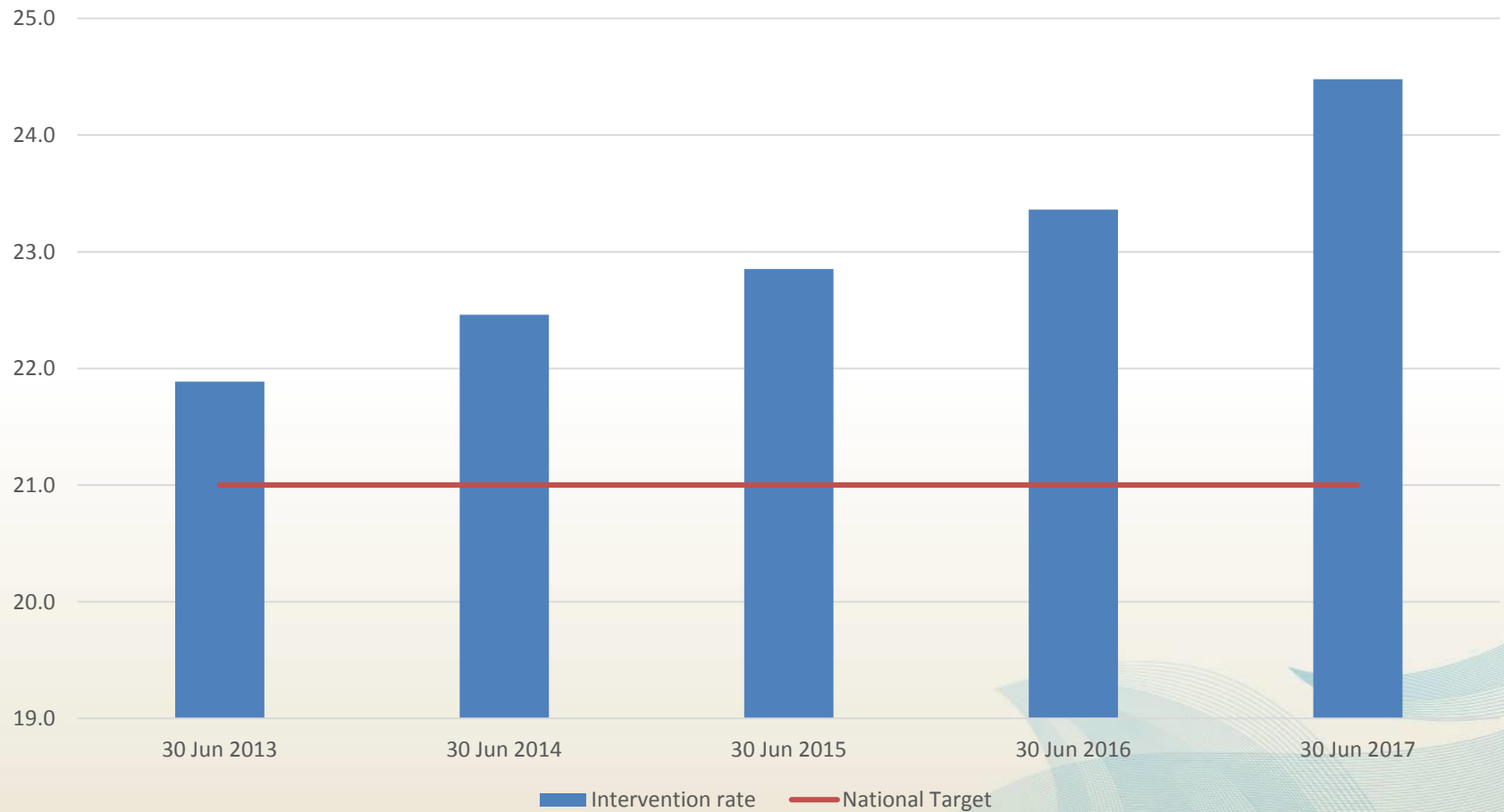
## **Appropriate care**

- Capability and capacity of primary healthcare to manage MSK conditions
  - Underutilization of workforce expertise and competencies /expertise
  - Analgesics and arthroplasty seen as the main solutions
  - Perception of inefficient use of healthcare resources
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# Publicly Funded Elective Orthopaedic Discharges 2007/08-2016/17



## National Intervention Rate per 10,000 Population for Major Joints





# Evidence Based Management of MSK Conditions

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**Education** – access to appropriate information (verbal, written, visual)

- Countering misconceptions & unhelpful beliefs and attitudes
- Individualised self-management strategies to address behaviour change

**Activity and Exercise**

- For everyone, regardless of age, comorbidity, pain severity or level of disability
- Includes muscle strengthening and aerobic fitness

**Cognitive methods to manage pain and stress**

**Medications**

**Biomechanics**

- Weight Loss if Overweight/Obese
  - Footwear, orthotics
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# Community Based Rehabilitation Can Reduce Surgical Demand

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**ARD**

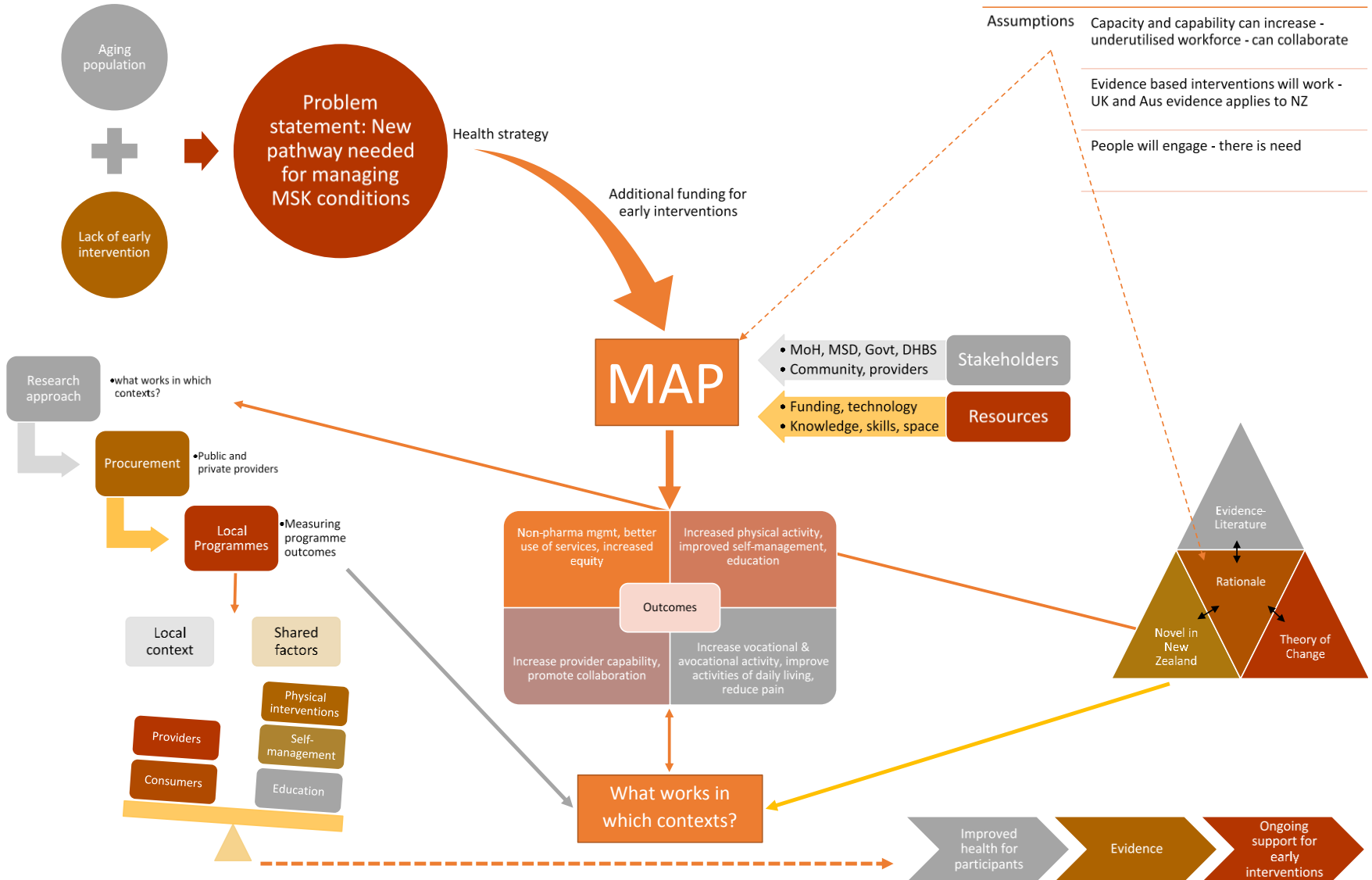
## **Exercise therapy may postpone total hip replacement surgery in patients with hip osteoarthritis: a long-term follow-up of a randomised trial**

Ida Svege, Lars Nordsletten, Linda Fernandes, et al.

*Ann Rheum Dis* published online November 19, 2013  
doi: [10.1136/annrheumdis-2013-203628](https://doi.org/10.1136/annrheumdis-2013-203628)

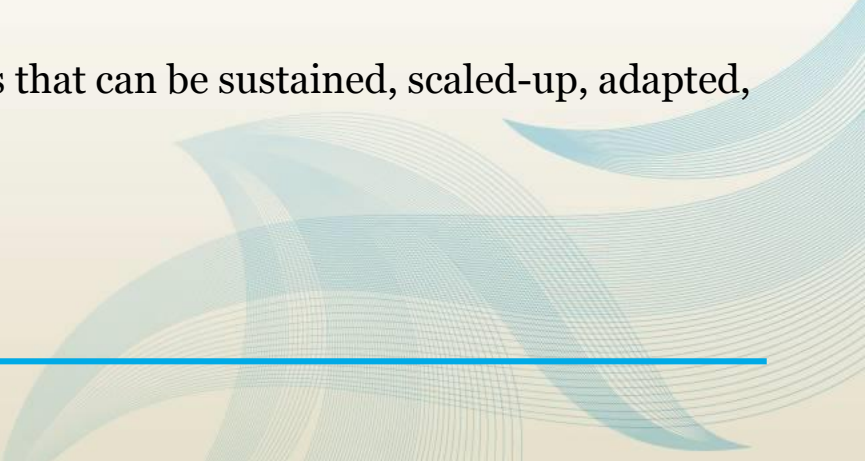
By 15-40% in different studies  
(Australia, UK)

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# Mobility Action Programme (MAP) Aims


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1. Fund a range of early intervention programmes for people with musculoskeletal health conditions: evidence informed, consumer focussed, community based, multidisciplinary.
  2. Prioritise services for Maori and other population groups that experience disparities in access to health services and clinical outcomes.
  3. Improve access, health outcomes and consumer experience for people with musculoskeletal health conditions.
  4. Identify most **effective and affordable** models that can be sustained, scaled-up, adapted, implemented across the health care system.
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# Target population

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## **Adults with musculoskeletal health conditions:**

- that affect any part of the body
  - that limits their participation in activities important to them and impacts on their quality of life.
  - that has been present for longer than three months.
  - who are not being funded by ACC.
  - prioritise access for people who experience disparities in access to care and clinical outcomes eg Maori and Pacific Island people, those who live in areas of higher deprivation
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# Measurement strategy

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A systematic approach for all MAP participants wherever they receive services

Four data points: baseline, end of programme, 3/12 and 12/12 post completion

## Measures

- Pain (Numeric Pain Scale)
  - Mobility (Timed Up and Go)
  - Function ( Oxford Hip / Knee, etc depending on region of body affected)
  - General health status (SF12 V2)
  - Impact on work
  - Comorbidities
  - Self Efficacy to manage their condition
  - Other health service use
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# OUTCOMES

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So far

1800 Participants

17 programmes / 14 providers / 20 DHBs

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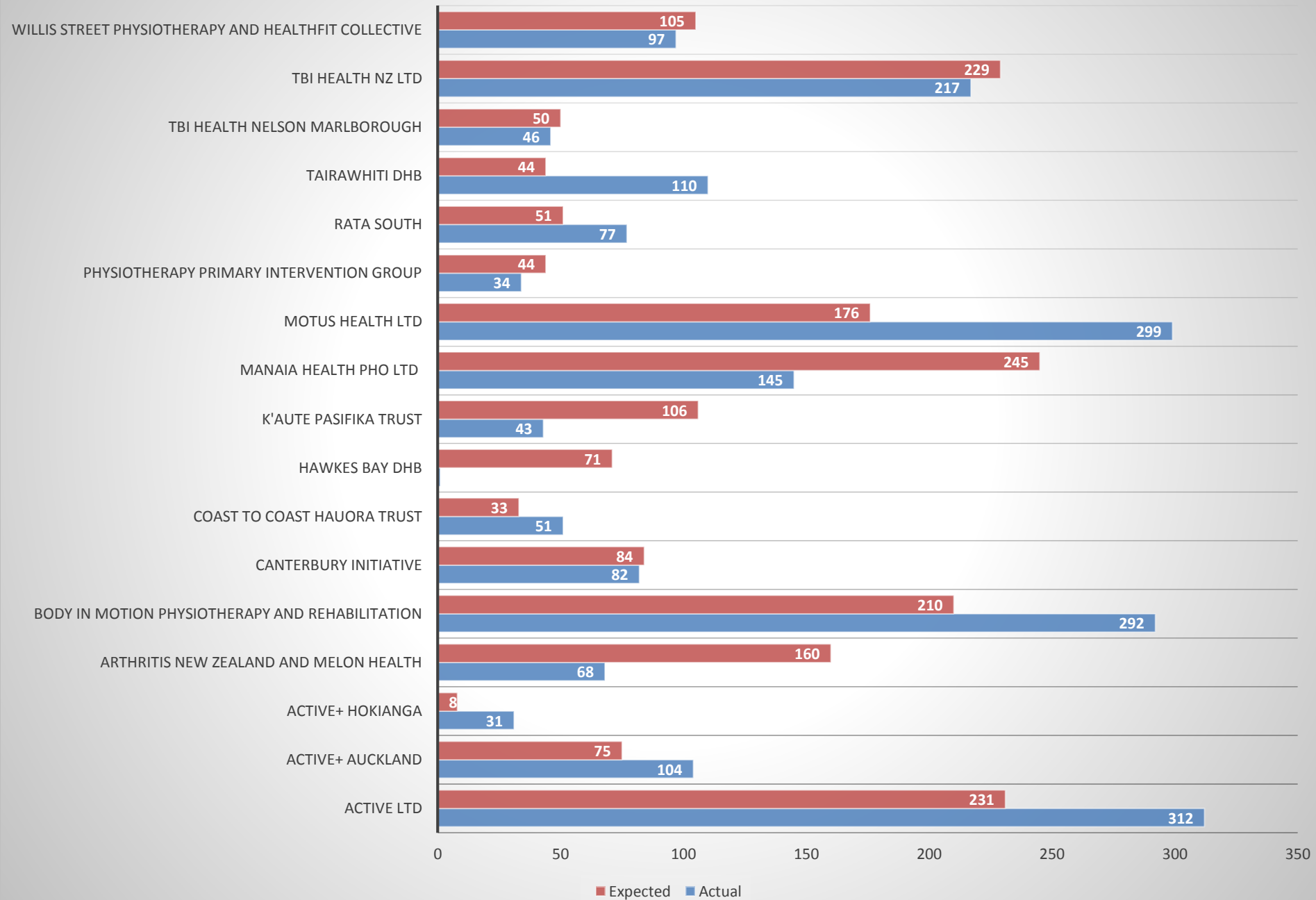


# MAP Providers

<b>Northland DHB</b>	<ol style="list-style-type: none"> <li>1. Hokianga Health Enterprise Trust, Te Tai Tokerau PHO, Active + , NDHB</li> <li>2. NDHB, Active +, Manaia Health PHO, NDHB, private rehab providers</li> <li>3. Coast to Coast Trust &amp; private providers (NDHB &amp; WDHB)</li> </ol>
<b>Auckland DHB</b>	Active +, ADHB, ProcCare GP Network
<b>CMDHB</b>	Active + (Private rehab company)
<b>Waikato DHB</b>	K'aute Pasifika Trust & Active +
<b>BOPDHB</b>	Body In Motion Ltd (Private rehab company)
<b>MCDHB/HVDHB</b>	TBI Health Ltd (Private rehab company)
<b>CCDHB</b>	Willis Street Physiotherapy and Healthfit Collective
<b>Tairāwhiti DHB</b>	Hauora Tairāwhiti, Te Hauora O Turanganui a Kiwa (Turanga Health)
<b>HBDHB</b>	HBDHB, Health Hawkes Bay PHO, Iron Maori,
<b>NMDHB</b>	TBI Health, NMDHB, Marlborough PHO and Te Piki Oranga
<b>CDHB</b>	<ol style="list-style-type: none"> <li>1. Motus Health Ltd</li> <li>2. Canterbury Initiative and ARA Polytechnic.</li> </ol>
<b>SDHB</b>	Southern Rehab Otago Ltd
Whanganui, Taranaki, West Coast, Wairarapa	Arthritis New Zealand and Melon Health Ltd



# Progress by provider

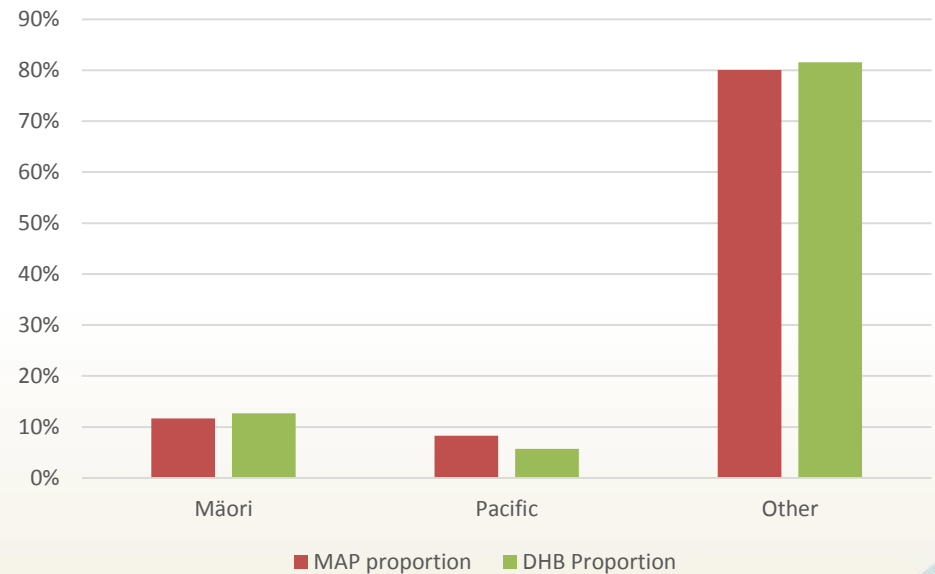


# Who is accessing the MAP\*?

Deprivation



Ethnicity



\*Data presented covers all providers. It was also assessed by individual provider at the DHB level

# Physiotherapy Primary Intervention Group (PPIG) South Canterbury DHB

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## Target population

People with early to moderate hip and knee Osteoarthritis (OAHK)

## Location

Fairlie, Waimate, Geraldine, Timaru

## Referral sources

Self referrals, Arthritis NZ, Physiotherapists, GPs, Orthopaedic & Rheumatology SMO's and CNS at SCDHB

## Providers of care

Physiotherapists, Dieticians, Ortho surgeon, Occupational Therapists (based on client need)


## Pathway

Triage against access criteria, outcomes include:

- Initial assessment, if suitable for the programme:
  - Initial private consultation with senior physio if client has more advanced/severe OA. If consequently considered suitable, cost of consultation is taken as part payment for the MAP. Alternatively, pt. may be referred to 2ndary care following discussion with orthopaedic surgeon.
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# PPIG Programme

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- 12 week / one hour group exercise class, individualised for peoples needs and abilities
  - Wk. 6: Evening education session with Orthopaedic Surgeon, Physio, OT and Dietician
  - 4 week home exercise programme supported by weekly phone calls by physio
  - Face to face review at week 17
  - Phone reviews at 3/12, and 24 months
  - Referral to wider MDT as reqd i.e. Smoke Free Facilitator, Nurse Specialist, radiology or Orthotist,
  - (no co-pay for CSC holders, Non CSC holder are charged \$150 part payment for MAP)
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# Coast to Coast Hauora Trust

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## **Participating Organisations**

5 providers in small rural locations South of Whangarei, Nth of Auckland, collaborating to deliver a community based model developed in response to local needs and resources. (Te Ha Oranga, Active Living Physio, Coast to Coast (C2C) Healthcare, Restart Rehab)

## **Programme goals**

Enhance carer/whanau health literacy, understanding how to manage MSK conditions, strengthen capabilities to manage pain, function, reduce stress, improve whanau wellbeing, support participants in their goals

## **Target population**

- People with OA, RA, lower back pain, residual pain and disabilities that may come from injuries, not covered by ACC.
- Maori and Pacific people and those living Deprivation quintile 5 areas

## **Location of services**

People usually resident in areas and townships around Wellsford, Kaiwaka, Mangawhai, Paparoa, Maungatoroto.

## **Referral sources**

GPs, Pharmacists, Nurses, OTs, Physiotherapists, Kaimanaaki workers, whanau

## **Providers of care**

Physiotherapists, OT, Kaimanaaki workers, dieticians, nurses, GPs, pharmacists

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# Coast to Coast Programme

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## **Service package 1: MY MAP 10** (Less complex presenting conditions)

- Facilitated by OT, Physio, in collaboration with staff from Te Ha Oranga, input from psychologists, pharmacists, dieticians depending on participants needs.
- 8 Week 2 hour group education and exercise programme tailored to individuals needs, Follow up at week 9 and 10

## **Service package 2: Individualised programmes for people with more complex MSK conditions**

- MDT assessment and management plan, usually including up to 3 members of the MDT.
  - Up to 10 specific individual sessions that may include:
    - Small group education and exercise sessions tailored to individual needs
    - Physiotherapy supported hydrotherapy
    - One on one OT and Physio up to 6 goal directed sessions addressing:
      - Self care education / Exercise and or manual therapy / Pain management
      - Psychologist sessions eg Cognitive behaviour therapy, integrating Maori traditional methods eg Miri miri, Maori tai chi, poi, kapa haka, using Maori te reo and music
      - Pharmacists sessions, foot care for participants unable to provide own foot care
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# Evaluation

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An independent evaluation has been commissioned with Allen & Clark

Multi-year evaluation using the programme logic

- Implementation
- Case studies
- Health economic analysis
- Clinical outcomes

Intent to find out which models work best, for whom, in which context

Will inform future investment decisions

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# Key Insights..

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## Engaging with consumers

- Engage with consumers early to get their views on what would be helpful to them

## Equity

- Seek equity advice at the beginning of your initiative, include equity expertise in advisory groups
- Expect processes for addressing equity to take as much, if not more time as processes for procurement, measurement, planning, monitoring and evaluation

## Primary care

- Despite initial enthusiasm and perceived need for community based rehabilitation for MSK conditions, referrals from GPs has been disappointing. The referral base had to be widened to ensure recruitment targets could be met
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# Questions?

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