



**ACI** NSW Agency  
for Clinical  
Innovation

# **The Osteoarthritis Chronic Care Program *Implementing the Evidence***

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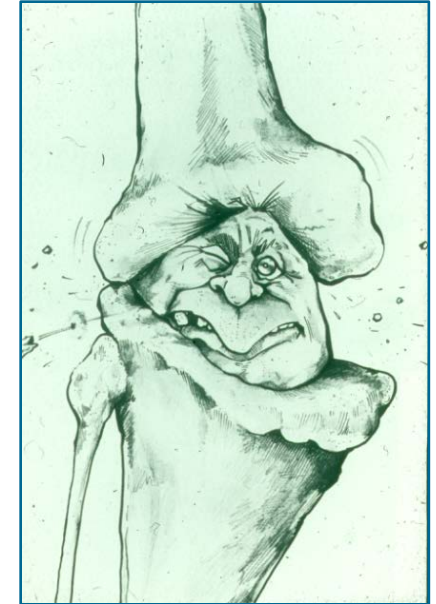
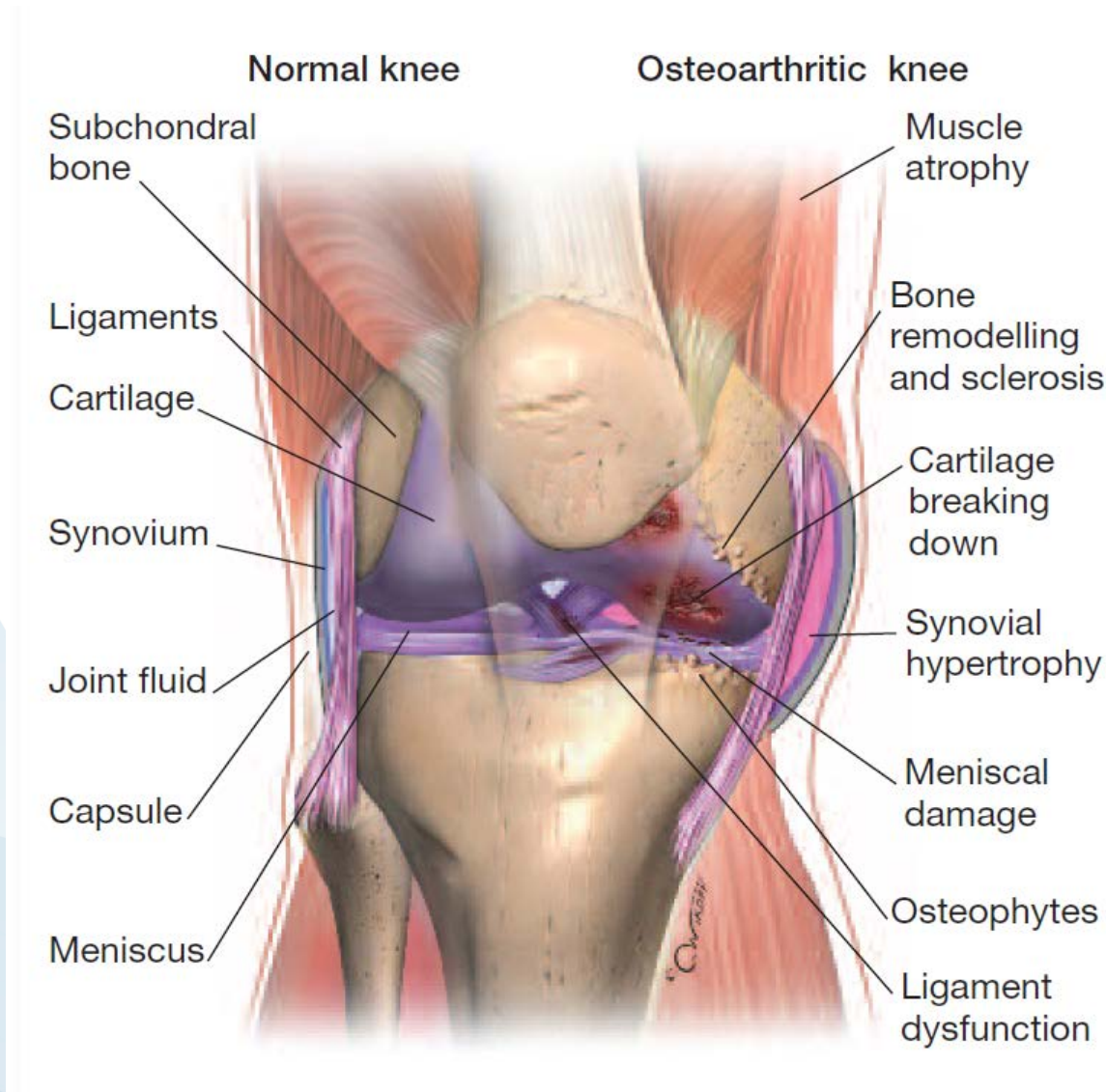
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Working Group Lead

ACI Osteoarthritis Chronic Care Program (OACCP)

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# What is osteoarthritis?



# The Size of the Problem

- 3.85 million Australians had arthritis in 2007, 2.4 million in the working age population (15-64 yrs)\*
- The risk of disability due to knee OA alone is greater than that due to any other medical condition in people over 65
- The total cost of arthritis to the Australian economy was almost \$24 billion in 2007\*
- OA accounts for >95% of knee and hip replacement

\* Access Economics, 2007

# National Health Priority Area

- MSK conditions are a priority area in the National Chronic Disease Strategy (2002)

	Arthritis	COPD	Diabetes	CVD
Prevalence	10.4%	3%	7.5%	1.9%
Morbidity	71,000 hospital separations	54,000 hospital separations	66,700 hospital separations	164,000 hospital separations
Health Resource Use	\$1.18 B (2.5% total health expenditure)	\$432 M (0.9% total health expenditure)	\$812 M (1.6% total health expenditure)	\$1.47 B (2.9% total health expenditure)

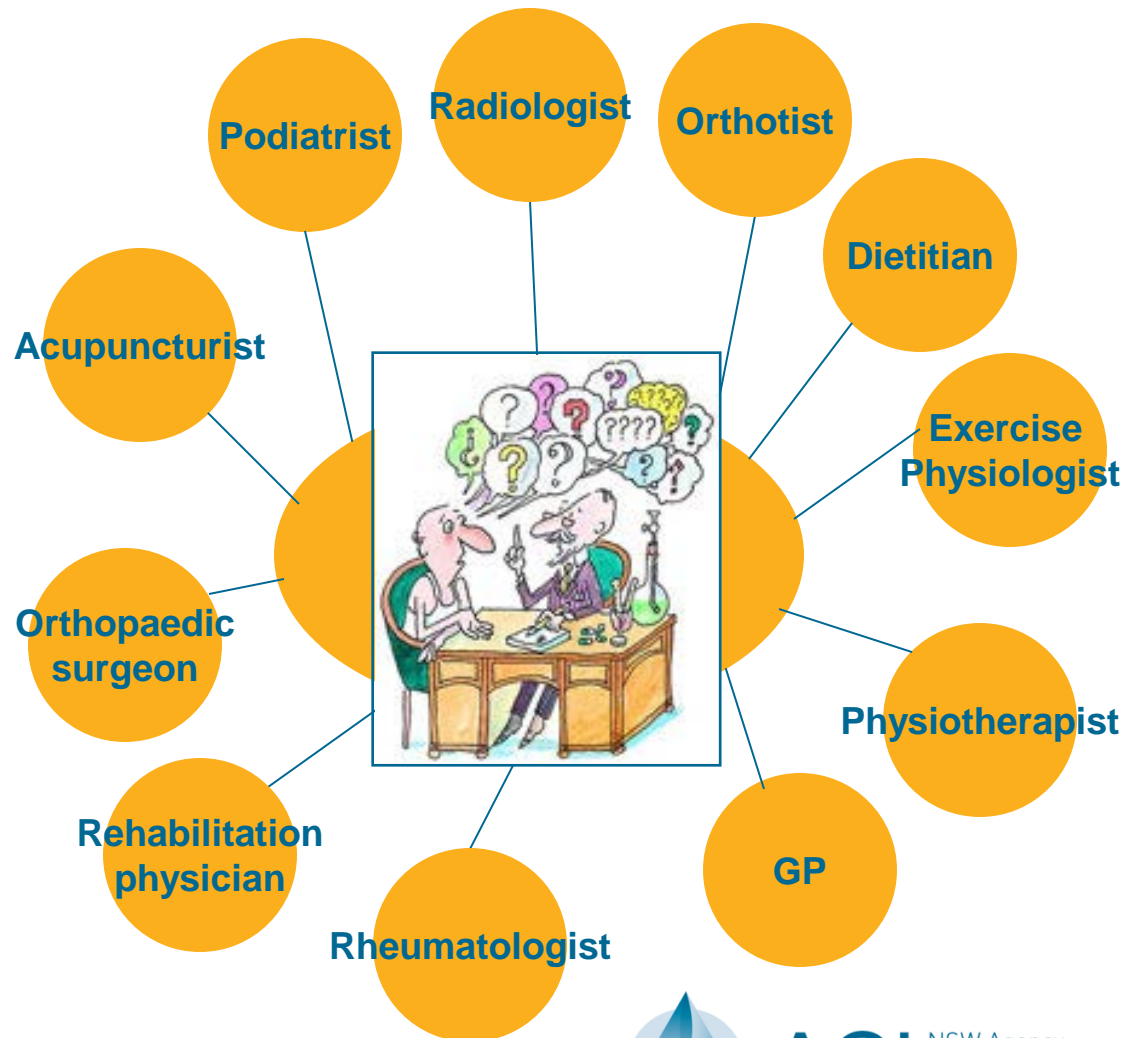
Source: *Chronic Diseases and Associated Risk Factors in Australia* (AIHW, 2006)

# Need for change

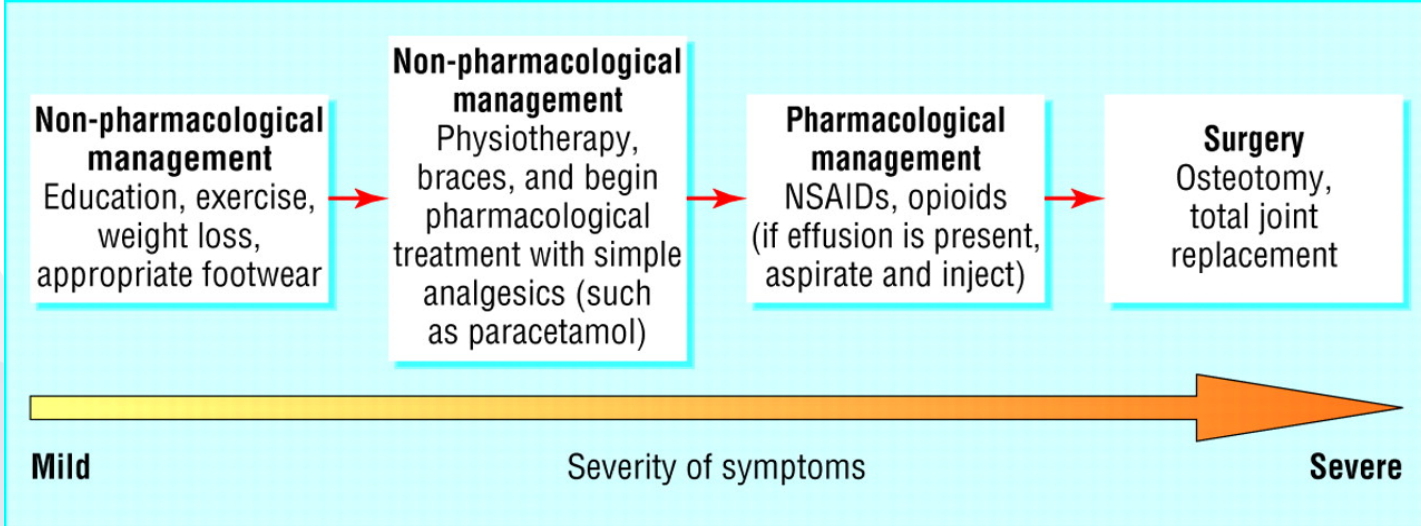
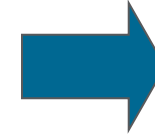
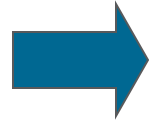
- Fewer than 8% of Australians tried to lose weight as part of their OA treatment (AIHW, 2007)
- BEACH report\*: suboptimal use of allied health practitioner interventions to support behaviour change for exercise and weight loss
- Only 3.9% of OA encounters were referred for allied health intervention
  - 81.7% were referrals to physiotherapy, 3.3% hydrotherapy, 0.8% to a dietician

# Silo approach

- Current management features multiple health care providers who:
  - do not coordinate their care
  - provide mixed messages to people with OA
  - don't measure the outcomes of their service provision



# Algorithm for OA Management



Source: Hunter DJ. *BMJ* 2006; 332: 639-642.

# Previous OA / EJR work

- Victoria: Orthopaedic Wait List (OWL)
  - ▲ Development of MAPT as screening tool
  - ▲ Prioritise outpatients, waitlist on clinical need
- Queensland: Orthopaedic Physiotherapy Screening Clinics (OPSC)
  - ▲ Physiotherapist as case manager
  - ▲ Improved access to conservative care
  - ▲ All outpatient referrals triaged for inclusion



# NSW Health priority

- NSW Ministry of Health identified need for improved orthopaedic waitlist management
- Sought rapid implementation of model of care and pilot program
- Support and commitment from MSK Network members crucial

# Solution...

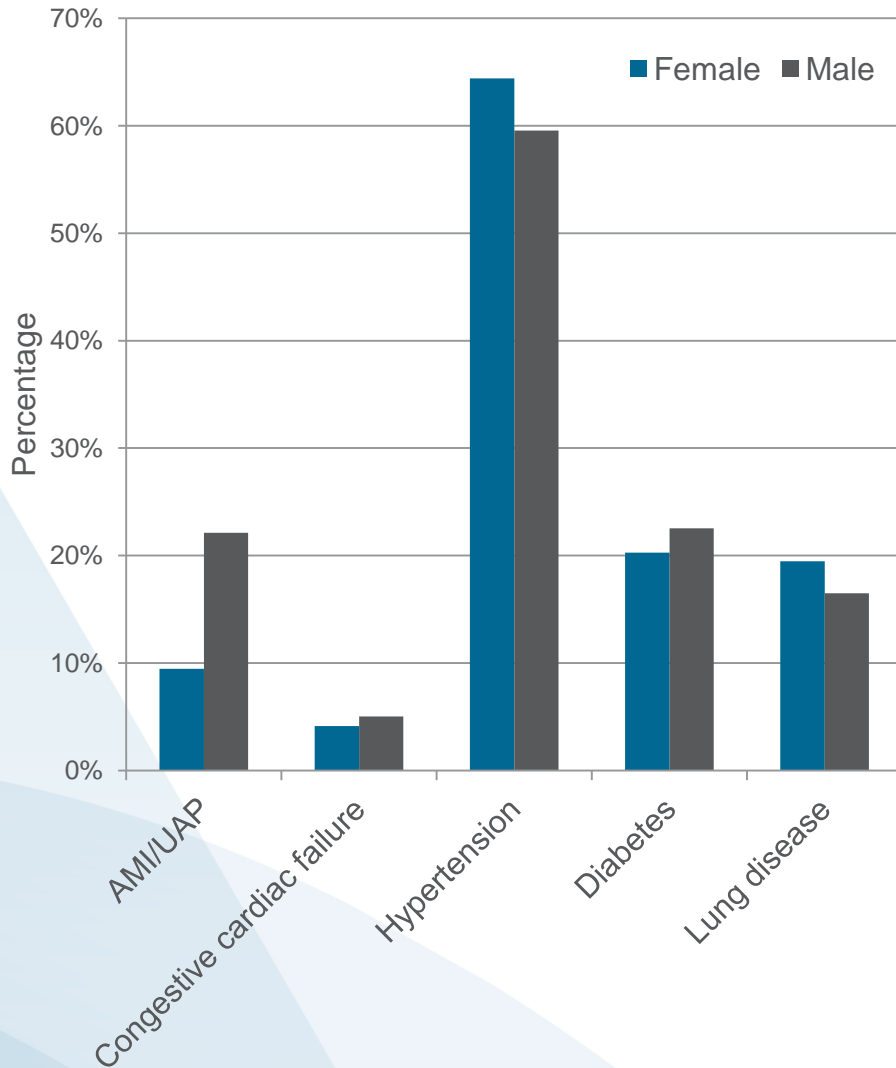
- Work of the Musculoskeletal Network re-prioritised
- Rapid development of:

## **NSW Osteoarthritis Chronic Care Program (OACCP)**

# OACCP approach

- Holistic – ‘whole’ person focus...
- Multidimensional
  - ◆ Exercise and physical activity
  - ◆ Weight loss
  - ◆ OA and other health conditions
  - ◆ Self management support and education
  - ◆ Orthoses
  - ◆ Pharmacological treatment
  - ◆ Psychological support
  - ◆ Liaison between primary care and health services
  - ◆ Joint replacement

# Concomitant morbidities



- OACCP participants:
  - ▲ 90% overweight/obese
  - ▲ 60% have hypertension
  - ▲ 20% have depression
  - ▲ 20% have diabetes
- Co-morbidities compound management challenges
- Frequently ignored in current silo-based management approaches

*Archives of Internal Medicine 2004, 164: 807*  
*American Journal of Managed Care 2002, 8: S383-S391*  
*Arthritis & Rheumatism 2005, 52: 2026-2032*

# Multidisciplinary care

- Person with OA
- Physiotherapist
- Dietitian
- Occupational Therapist
- Psychologist
- Pharmacist
- Podiatrist/Orthotist
- Nurse
- GP/Specialist medical
- Community Groups
- Identify and manage co-morbidities for improved overall health
- Pharmacologic review with GP, pain clinic, CNC
- Recognise and address depression, anxiety, stress
- Exercise - strengthening, aerobic conditioning
- Weight management, optimal nutrition
- Joint protection, need for assistive devices, lifestyle/functional adaptations

# OACCP outcomes

- Clinical generic
  - ◆ Quality of life, psychological discomfort, physiological parameters
- Clinical condition-specific
  - ◆ Pain, function, disability: VAS, HOOS/KOOS, MAPT
  - ◆ Functional performance measures: TUG, 6 min walk distance
- Stakeholder satisfaction
  - ◆ Participants, referral source, team members, Local Health Districts and steering committees
- Organisational
  - ◆ KPI (number referred, management plan developed, completed)
  - ◆ Waiting list management (escalation, cancellation)

# OACCP preliminary results

- Fewer participants at risk of falls based on Timed Up and Go of >13.5 sec
  - ▲ 45% at risk on entry; 36% at week 26 review
- Small but statistically significant improvements in BMI, waist circumference
  - ▲ Waist circumference: reduced by >3cm in 39% at week 26
- 6MWT - 38% people referred for knee OA
  - ↑ walk distance by >50m at week 26

# Participant satisfaction

- 91% are satisfied or very satisfied with participation in OACCP
- *“The personal interest placed on my overall health”*
- *“They not only helped me to maintain and understand, but they were compassionate, kind and very understanding. I felt very at ease and encouraged”*



# Stakeholder satisfaction

- *“I find the clinic review and the scores invaluable in assisting with [surgical prioritisation], and often [the team’s] advice will help patients manage the wait”*

Orthopaedic surgeon, OACCP site

# Organisational

- 48 participants (5%) removed from surgical waitlist as no longer requiring surgery (of 888 enrolled to end 2011)
  - ▲ Most at or after week 26
- 32 participants (3%) escalated to surgery
  - ▲ Mostly from initial or week 12 assessment
- **To 30 April 2012, 1,869 people enrolled in OACCP across NSW**

# Conclusions

- OA burden of disability is staggering
- OA management
  - ▲ Dichotomy between guidelines and clinical practice
- Step to re-engineering health service delivery for chronic disease management
- Provision of appropriate conservative care to people with clinical need

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# END



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