

# Current Concepts in Management of OA Knee



## **“ The Arthritis Society 60 Years of Arthritis Research and Programs”**

**From unproven remedies to evidence based practice**

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Arthritis Rehabilitation and Education Program**

**June 12<sup>th</sup> 2009  
University Hospital  
London**





## **The Arthritis Society**

**Providing education, community support and research-based solutions to people living with arthritis, giving hope for a better life – today and tomorrow.**

## Founded in 1948

- **Four Main Aims:**
  - Professional Education
  - Research based solutions
  - Treatment Services
  - Public Education



# WD-40<sup>®</sup>

- Stops Squeaks
- Drives Out Moisture
- Cleans And Protects
- Loosens Rusted Parts
- Frees Sticky Mechanisms

- Elimina el rechinar
- Expelle la humedad
- Limpia y protege
- Afloja las piezas oxidadas
- Libera los mecanismos trabados

PRODUCTO MULTIUSOS — HECHO EN E.U.A.

**PELIGRO:** Inflamable. Envasado bajo presión.  
No vivo o letal si se inhala.

NET WT. 5.5 OZ.

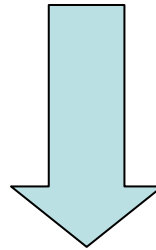
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# The Arthritis Society's Mission



Promote the best possible care and treatment  
for people with arthritis

Search for the underlying causes and  
subsequent cures for arthritis



**Arthritis Rehabilitation and Education Program**

# Arthritis Rehabilitation and Education Program (AREP)



- Established in Ontario in 1952
- Covers 90% of Province
- Not for profit, community based rehabilitation program for people of all ages with arthritis
- Funded by Ministry of Health and Long-Term Care:
  - Client care is provided in a variety of settings
  - Home, school, workplace
  - Ambulatory care sites [70% +]
- Services provided by occupational therapists, physiotherapists, and social workers (SWs) with advanced training in arthritis management
- Partnerships with physicians/ hospitals/ industry/ CHCs/ FHTs

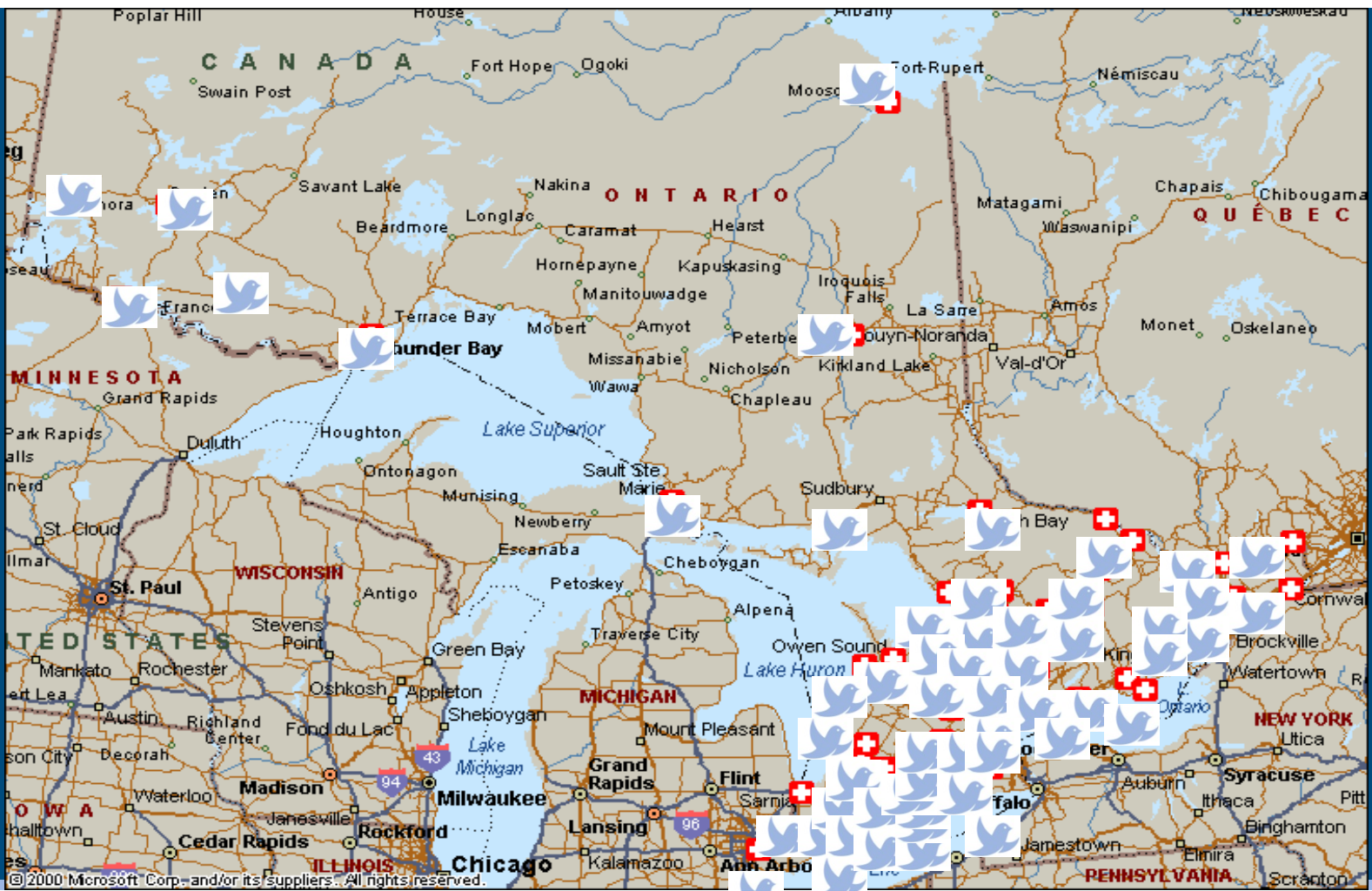




# People with a *confirmed diagnosis* of arthritis learn:

- How to manage pain
- Updates on medication
- Exercise to reduce stiffness, increase strength, and improve fitness
- How to feel less tired
- How to protect joints and use helpful devices
- Ways to cope with the emotional impact of arthritis
- Ways to adapt to their homes and workplace
- How other services in their community can help

# Society Clinic Sites in ON



# *Getting a Grip on Arthritis:*

*A National Primary Health Care  
Community Initiative*

# Partners



- The Arthritis Society
- Sunnybrook and Women's College Health Sciences Centre
- Canadian Alliance of Community Health Centre Associations (CACHCA)
- Canadian Nurses Association (CNA)
- Arthritis Community Research and Evaluation Unit (ACREU)
- Canadian Rheumatology Association (CRA)
- Arthritis Health Professions Association (AHPA)
- Patient Partners in Arthritis
- Ontario Ministry of Health and Long-term Care



# Barriers in Primary Care

Low confidence with joint examination

Difficulty in diagnosing RA

Delay in referring to specialists

Inappropriate NSAID use

Lack of information for patients:

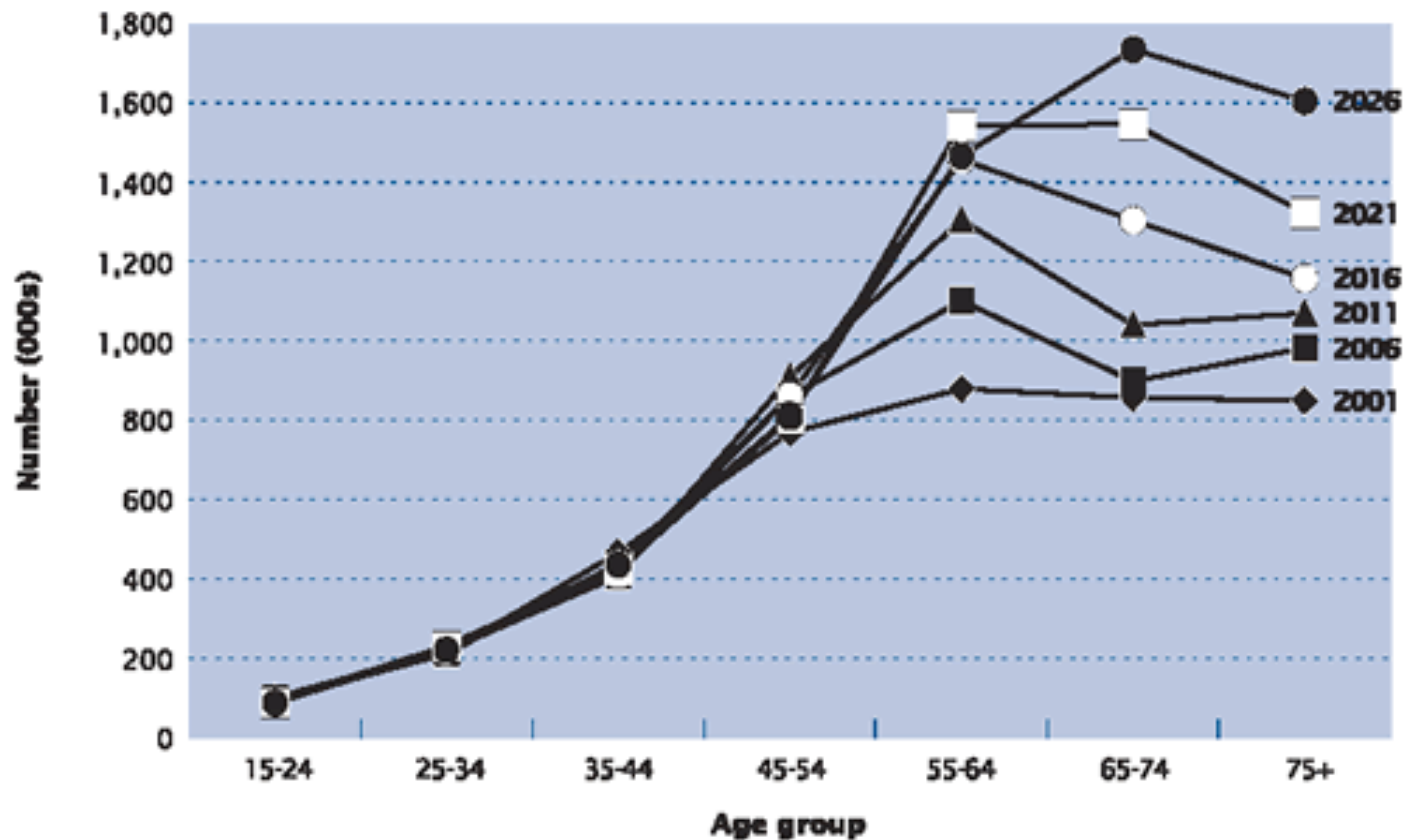
- exercise
- medications and their side effects
- maintaining a healthy body weight
- coping with arthritis
- pain management
- community resources

ARTHRITIS is the leading cause of disability in  
Canada

A major cause of:

- chronic illness
- prescription drug use
- non-prescription drug use
- visits to health care  
professionals

**Figure 2-5** Number of individuals projected to have arthritis/rheumatism, by year and age group, household population aged 15 years and over, Canada, 2001-2026



Data source: Canadian Community Health Survey 2000, Statistics Canada; Population projections 2001-2026, Statistics Canada

# Arthritis by the Numbers



- 4.5 million Canadians have Arthritis
- By 2026 , this number will increase to estimated 6 million
- Currently, approx 500,000 live in South western Ontario

## Over 100 types of arthritis

OA –affects 1 in 10

RA –affects 1 in 100

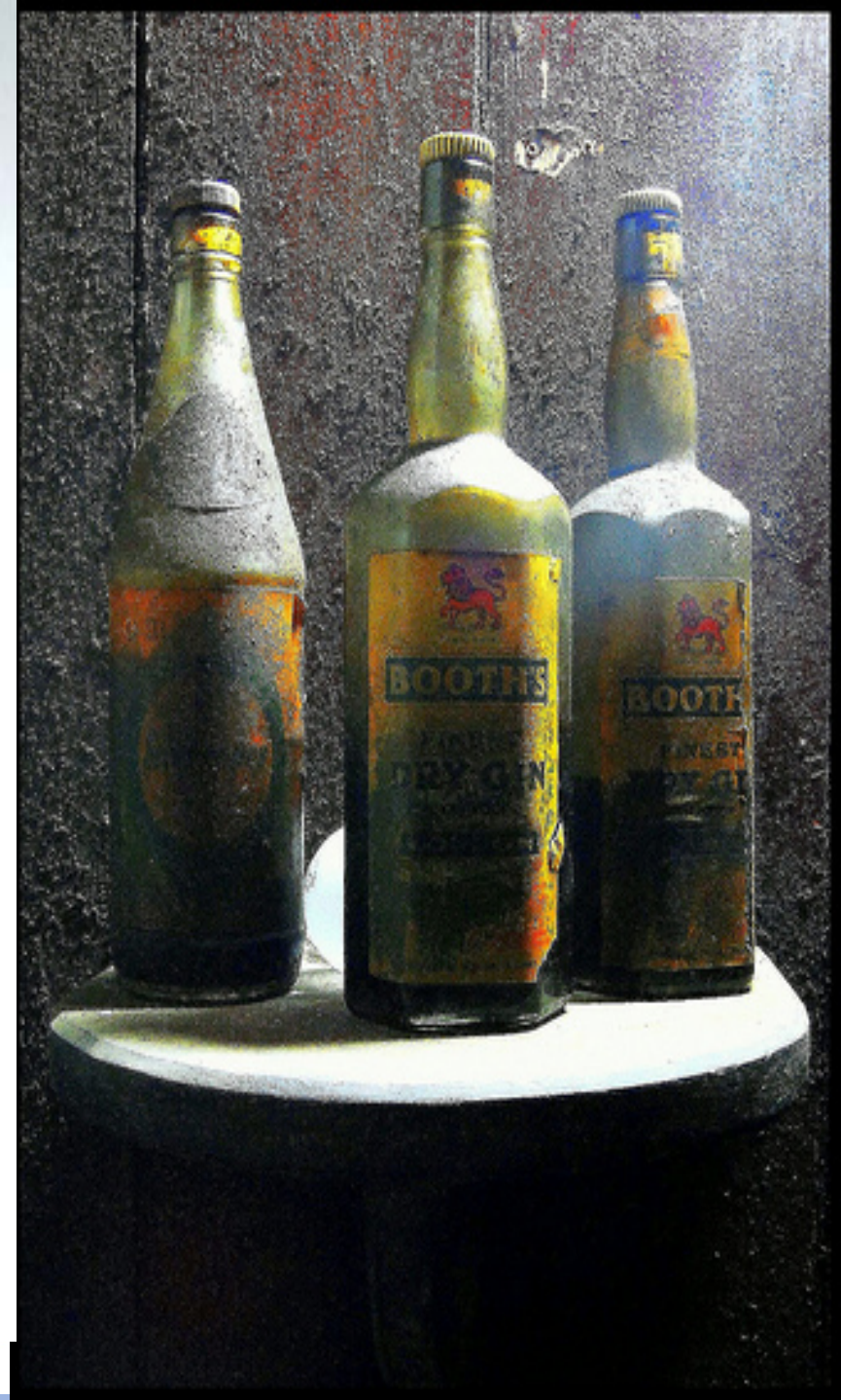
Ankylosing Spondylitis -1 in 500

Lupus – affects 1 in 2000

JIA – 1 in 1000 children under 16 years old

Gout –affects 1 in70





# What are best practices for OA?

Glazier RH et al J. Rheumatology 2005 Jan. 32(1) 137-42

Your patient knows what kind of arthritis he or she has  
Patients receive education about self-management strategies

- [www.arthritis.ca](http://www.arthritis.ca)
- Arthritis Self-Management Program [ASMP]
- The Arthritis Society information line  
1.800.321.1433
- Local programs and resources

Patients receive a recommendation for exercise or a referral to an exercise program or to a PT:

- Patients with arthritis can exercise safely  
no evidence of deterioration or increased joint pain
- Requires tailoring to individual





Patients receive information about  
joint protection, assistive devices  
and energy conservation or a referral  
to an OT



I have a cane  
and I know  
how to use it



HOUSE



Patients are encouraged to achieve and maintain ideal body weight:

- Rationale: reduce stress on joints
- Multiple benefits of weight loss for co-morbid conditions: eg. hypertension, diabetes



# FAT CHANCE

A majority of the public wants the NHS to deny obese people surgery until they lose weight

Patients are offered information on various psychosocial interventions that address coping, financial needs and lifestyle issues and to treat associated anxiety and depression

Patients receive appropriate and timely referral:

- Establish the diagnosis
- Early referral to rheumatology for inflammatory arthritis
- Surgical opinion for people with pain and disability not responding to medical treatment



## OARSI recommendations for the management of hip and knee osteoarthritis, Part II: OARSI evidence-based, expert consensus guidelines.

W. Zhang et al Osteoarthritis and Cartilage 2008 16. 137-162

# OARSI Non Pharmacological

## Guidelines

Strength of Recommendation -SOR

- education and self-management (SOR= 97%)
- regular telephone contact (66%)
- referral to a physical therapist (89%)
- aerobic, muscle strengthening and water-based exercises (96%)
- weight reduction (96%)
- walking aids (90%)
- knee braces (76%)
- footwear and insoles (77%)
- thermal modalities (64%)
- transcutaneous electrical stimulation (58%)
- acupuncture (59%)

# OARSI Pharmacological Guidelines

- acetaminophen (SOR-92%)
- non-selective and selective oral non-steroidal anti-inflammatory drugs (NSAIDs) (93%)
- topical NSAIDs and capsaicin (85%)
- intra-articular injections of corticosteroids (78%)
- intra-articular injections of hyaluronans (64%)
- glucosamine and/or chondroitin sulphate for symptom relief (63%)
- glucosamine sulphate, chondroitin sulphate and/or diacerein for possible structure-modifying effects (41%)
- opioid analgesics for the treatment of refractory pain (82%)



# OARSI Surgical Guidelines

SOR = Strength of Recommendation



- total joint replacements (SOR-96%)
- unicompartmental knee replacement (76%)
- osteotomy and joint preserving surgical procedures (75%)
- joint lavage and arthroscopic debridement in knee OA (60%)
- joint fusion as a salvage procedure when joint replacement had failed (69%)

**ARTHRITIS**  **FIGHT IT!**



It is important to keep exercising - often a programme of exercise will be needed



Defined as:

2002: Preventative Rehabilitation

Administered between 3 months and  
18 months prior to surgery

Today: 2 weeks to 5 months

# Rationale for our role:

- Clients with greater pre-surgical pain, stiffness and limited function have been shown to have poorer post-surgical outcomes. (Fortin et al 1999)
- The efficacy of pre-surgical interventions is of considerable interest to clients and clinicians

## Initial phase

- Pilot Study of effect of TAS Program for patient's awaiting TJR/TKR. Done in 2002 to 2004 (initial phase)
- Investigators: Dr. John Kramer, Nancy Ambrogio, Dr. Robert Bourne, Dr. Bert Chesworth, Sharon Cummings, Jeff Guerin, Pankaj Jogi, Dr. Steve MacDonald, Dr. Richard McCalden, Dr. Cecil Rorabeck, Marg Vaz

# Results:

- Since the TUG test is a test of mobility designed specifically for the elderly and incorporates elements of daily living, we view this test as being highly reflective of functional requirements of this population.
- 15% improvement in TUG
- Improvement in 7 out of 8 self reported measures
- Improvement in VAS Scale that measured anxiety, depression and coping
  - 26% less anxious
  - 26% less depressed
  - 28% less coping difficulty with their illness ( $p < 0.05$ )

# Prehab: AREP Role

- Optimize functional status prior to Sx
- Educate re: OA management /pain management strategies
  - : TJR pathway, preparation
  - : Joint protection
- Optimize home environment, identify and diminish barriers to D/C home post-op
- Fall prevention
- Prehab exercise programs
- Link to community exercise programs
- Weight management strategies
- ADL review in home –ambulatory aids/assistive devices
- Recommendations: post-op equipment needs
- Collaboration with hospital team re: complex patients
- Link to CCAC re: D/C planning issues

# Where we are today

- We now provide Prehab throughout this region
- We now have a total of 6 Orthopaedic Surgeons in London referring to this service
- We are the service providers under contract with the LM CCAC for all urgent and semi urgent Joint Replacement clients [London/Middlesex County]
- Last year, 900 + prehab clients where seen by AREP



# Appropriate Referrals

- Referrals: self or Health Professional
- Dx of Arthritis (RA, OA, JIA, AS, etc)
- Peripheral joint involvement
- Education, self-management focus

# TAS priorities

- Early ID
- Advanced Assessment (RA)
- Health promotion (OA)
- Prevention (OA)
- Exercise and education
- Psychosocial support
- Empowerment to manage care

**ARTHRITIS  FIGHT IT!**



Our Vision...

A world without arthritis.

*There is hope for people living with arthritis:*

**The Arthritis Society**

**[www.arthritis.ca](http://www.arthritis.ca)**

**1.800.321.1433 / [info@on.arthritis.ca](mailto:info@on.arthritis.ca)**

