

THE IMPACT OF ARTHRITIS IN CANADA: TODAY AND OVER THE NEXT 30 YEARS

Executive Summary

Arthritis is a chronic disease that has a devastating and debilitating effect on the lives of more than 4.6 million Canadians. Arthritis brings with it a burden of pain and disability that those living with this disease have to face every day. The main symptoms of arthritis are joint pain, stiffness and swelling, which result in significant disability and poor quality of life.

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Arthritis is costly to society—in both personal and economic terms. It is the most common cause of disability in Canada, resulting in both poor quality of life and workplace limitations. The disease has a significant impact on costs to both the public health care system and the economy. Without a doubt, arthritis' greatest burden is on the personal lives of those living with the condition and on the lives of their families.

The Impact of Arthritis in Canada: Today and Over the Next 30 Years focuses on two forms of arthritis, osteoarthritis and rheumatoid arthritis, but these are only part of the larger family of arthritis and musculoskeletal diseases, a family that numbers in excess of 100 separate conditions:

1. Osteoarthritis (OA) is a progressive joint disease that occurs when damaged joint tissues are unable to normally repair themselves, resulting in a breakdown of cartilage and bone. OA, the most common of arthritis, affects 1 in 8 (13%) Canadians and has a significant impact on long-term disability and the Canadian labour force.
2. Rheumatoid arthritis (RA) is the most common inflammatory joint disease. While it affects all age groups, more than one half of all new cases occur between the ages of 40 and 70 years. RA affects an estimated 0.9% of the Canadian population. Within ten years of the onset of the disease, up to 50% of people living with RA are work disabled if untreated. For those living with RA, related inflammation in the arteries results in an increased risk of mortality. Today, effective RA treatments exist, which can change these outcomes.



The goals of the report are to better understand the burden of arthritis on Canadians living with the disease today and over the next 30 years and to investigate the potential impact of targeted arthritis interventions to mitigate this burden.

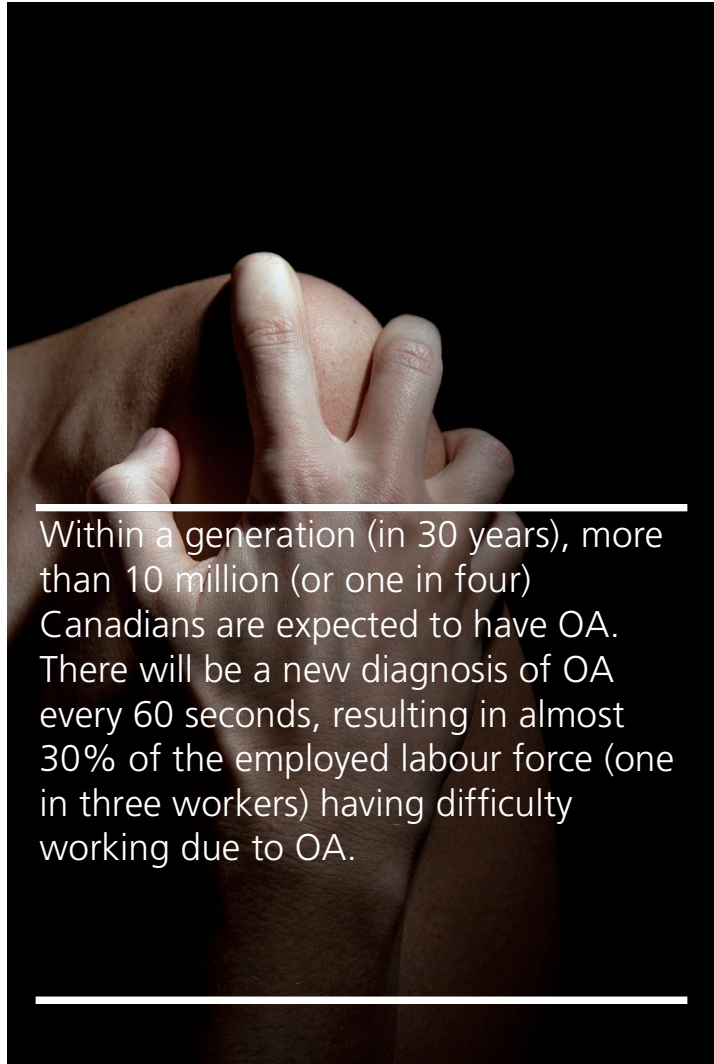
Four targeted interventions thought to offer the greatest return on public investment are examined in the report: three for OA and one for RA, as follows:

Osteoarthritis (OA)

1. Total joint replacement (TJR) intervention
2. Reduction of obesity rates in Canada
3. Adequate pain management strategies

Rheumatoid arthritis (RA)

4. Early diagnosis and treatment with cost-effective Disease Modifying Anti-Rheumatic Drugs (DMARDs) and for those who do not respond to traditional DMARDs, access to Biologic Response Modifiers (Biologics).



Within a generation (in 30 years), more than 10 million (or one in four) Canadians are expected to have OA. There will be a new diagnosis of OA every 60 seconds, resulting in almost 30% of the employed labour force (one in three workers) having difficulty working due to OA.

The Human Burden of Arthritis

Findings from *The Impact of Arthritis in Canada: Today and Over the Next 30 Years* indicate that the burden of arthritis in Canada is expected to have significant consequences in terms of health and costs on Canadians today and over the next 30 years.

There are currently more than 4.4 million people living with OA. Within a generation (in 30 years), more than 10 million (or one in four) Canadians are expected to have OA. There will be a new diagnosis of OA every 60 seconds, resulting in almost 30% of the employed labour force (one in three workers) having difficulty working due to OA. In addition, approximately 500,000 Canadians will be suffering with moderate to severe disability due to OA.

Today, more than 272,000 people are living with RA, comprising 0.9% of the Canadian adult population, which will increase to 1.3% over the next 30 years. Approximately 0.74% of the employed labour force, or 1 in 136 workers is suffering from RA. Within a generation, this will increase to 1.5%, or 1 in 68 workers

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There is hope, however. The evidence presented in this report illustrates examples of key interventions and strategies that, if implemented, would result in significant direct cost savings of valuable health care dollars and indirect cost savings to the economy, and more importantly, reduce the burden and consequences of the disease on Canadians living with arthritis.

Potential Interventions/Strategies for Managing the Burden of Arthritis

Total Joint Replacement (TJR) for OA

The long-term impacts (2010–2040) of enhanced access to TJR would result in **cumulative savings of more than \$17 billion** to Canadian society over the next 30 years, which is a reduction of \$3 billion in health care costs (direct costs) and \$14 billion in wage-based productivity costs (indirect costs).

Reduction of Obesity Rates in Canada

The impact of programs resulting in weight reduction among the obese (BMI \geq 30) population in Canada would lead to the prevention of more than 200,000 new cases of OA over the next 30 years with **cumulative savings of more than \$212 billion** to Canadian society, which is a reduction of \$48 billion in direct costs and \$164 billion in indirect costs. Further research is needed to improve on current strategies for preventing and treating obesity.

Pain Management Strategies for OA

The potential impact of adequate pain management strategies on OA would result in **cumulative savings of \$488 billion** over the next 30 years, which is a reduction of nearly \$41 billion in direct costs and \$447 billion in indirect costs. Today, pain management strategies are inadequate, investment in research is essential in order to achieve these savings.

Early Diagnosis and Treatment and Access to Disease Modifying Anti-Rheumatic Drugs (DMARDs) for RA

Early diagnosis and treatment of RA with cost effective DMARDs and, for those who do not respond to traditional DMARDs, access to biologic therapy, would result in **cumulative savings of almost \$39 billion** to Canadian society over the next 30 years, which is a reduction of over \$5 billion in direct costs and nearly \$34 billion in indirect costs.

This report identifies proven and effective interventions (TJR for OA and access to diagnosis and treatment with DMARD therapy for RA) that require urgent implementation. It also identifies two other intervention strategies for OA (reduction in population obesity rates and effective pain management) that have the potential to significantly reduce the burden of arthritis in Canada; however, further research is required to identify the best treatment strategies for these interventions.

Next Steps: Developing a National Framework for Arthritis

The four interventions outlined are only the beginning. Based on the findings of *The Impact of Arthritis in Canada: Today and Over the Next 30 Years*, the Arthritis Alliance of Canada will build the outline for a comprehensive National Framework for Arthritis. The framework will:

1. Identify principles to guide the design and delivery of more efficient and effective care;
2. Devise effective disease prevention strategies;
3. Propose an ongoing mechanism for the arthritis community to dialogue with governments and the broader healthcare community; and,
4. Establish research priorities and strategies to support ongoing improvements in the quality of arthritis care and prevention.

If nothing is done, the 4.6 million Canadians with this chronic disease will continue to live in pain.

Solutions are possible for people living with arthritis. If nothing is done, the 4.6 million Canadians currently bearing the burden of this chronic disease will continue to live in pain. Implementation of the interventions outlined in this report, along with other targeted initiatives, can make a difference. The arthritis community is already collaborating towards the development and implementation of these potential solutions. It is only with the collaboration of all stakeholders, including governments and the broader healthcare community, however, that success can be achieved. All stakeholders are invited to contribute to the development and implementation of a National Framework for Arthritis.

NOW IS THE TIME.

The full report of *The Impact of Arthritis in Canada: Today and Over the Next 30 Years* is available at www.arthritisalliance.ca



Arthritis Alliance of Canada
Alliance de l'arthrite du Canada

The Arthritis Alliance of Canada, formerly the Alliance for the Canadian Arthritis Program (ACAP), was formed in 2002. Its goal is to improve the lives of Canadians with arthritis.

With more than 20 member organizations, the Alliance brings together arthritis health care professionals, researchers, funding agencies, governments, voluntary sector agencies, industry and, most importantly, representatives from arthritis consumer organizations from across Canada. While each member organization continues its own work, the Alliance provides a central focus for national arthritis-related initiatives.