

# COUNTING THE COST

## EXECUTIVE SUMMARY

The current and  
future burden  
of arthritis



Report prepared for  
Arthritis Australia  
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 **Arthritis**  
AUSTRALIA

# EXECUTIVE SUMMARY

Arthritis is one of the most common, costly and disabling chronic conditions in Australia. In its many forms, it affects nearly four million people of all ages, including children, causing pain, stiffness, impaired physical function and reduced quality of life.

The immense personal, social and economic costs of arthritis are poorly recognised. These costs include health care costs, personal and societal costs associated with lost productivity, due to the impact of arthritis on work capacity, and, of course, the immeasurable cost of lost wellbeing.

In 2015 health system expenditure for arthritis was \$5.5 billion, making arthritis one of the most expensive disease groups in Australia.

As arthritis is the second leading cause of early retirement due to ill health in Australia, the impact of arthritis on productivity is also substantial.

Lost personal income due to arthritis-related early retirement totalled \$1.8 billion in 2015. Associated costs to government include at least \$635 million in extra welfare payments and \$458 million in lost taxation revenue, while the impact on the economy is calculated to be at least \$7.2 billion in lost GDP.

With the number of people with arthritis set to rise to 5.4 million people by 2030 it is imperative that we

investigate and implement programs to prevent and improve the management of arthritis to minimise the future burden of the condition.

One example is implementing programs to support better non-surgical management of knee osteoarthritis, which may delay the need for expensive joint replacements. The savings to the health system from this measure alone would be \$170 million in 2015, increasing to \$233 million in 2030.

*Counting the Cost: The Current and Future Burden of Arthritis* provides up to date estimates of the prevalence and costs of arthritis from 2015 to 2030 under a 'business as usual' scenario. It also models the impact of implementing non-surgical interventions for knee osteoarthritis to illustrate the potential benefits for individuals, governments and the economy from better arthritis care.

*Part 1 Healthcare Costs* estimates the current and future prevalence of arthritis and the associated costs to the health system. *Part 2 Economic Costs* considers the economic costs of arthritis, including lost personal income, increased welfare payments, reduced taxation revenue and lost GDP.

The complete reports are available at [www.arthritisaustralia.com.au/counting-the-cost](http://www.arthritisaustralia.com.au/counting-the-cost)

## KEY FINDINGS

### PREVALENCE

- The number of Australians with arthritis is predicted to increase by 38% from 3.9 million in 2015 to 5.4 million in 2030.
- Of these, the number of people with osteoarthritis is expected to increase from 2.2 million in 2015 to 3.1 million in 2030, while the number of people with rheumatoid arthritis is set to increase from more than 400,000 in 2015 to 580,000 in 2030.
- The prevalence of juvenile arthritis is expected to increase from 6006 children in 2015 to 7,334 children in 2030.



## HEALTH SYSTEM COSTS

- Health system costs for arthritis in 2015 were estimated to exceed \$5.5 billion rising to more than \$7.6 billion by 2030.
- Osteoarthritis remains the most expensive form of arthritis, with health system costs estimated to exceed \$2.1 billion in 2015 and forecast to reach more than \$2.9 billion in 2030.
- Implementing conservative (non-surgical) management strategies for people with severe knee osteoarthritis could save the health system \$170 million in 2015 by reducing demand for expensive knee replacements. These savings could increase to more than \$233 million in 2030.
- Health system costs for rheumatoid arthritis were over \$550 million in 2015 and this is projected to increase to over \$755 million by 2030.
- Available data from a case study suggest that if all children with juvenile arthritis received best practice care the total cost to the health system could be approximately \$40.3 million dollars per year. By 2030, this could rise to nearly \$49.2 million dollars per year.

### Arthritis health system costs



## ECONOMIC IMPACTS

### Lost labour force participation

- Arthritis is the second most common cause of early retirement due to ill-health in Australia.
- In 2015, 52,000 people aged 15-64 years were out of the labour force due to their arthritis and this is projected to increase to 59,000 by 2030.
- In addition there were 19,000 primary carers (aged 15-64 years) of people with arthritis who were out of the workforce due to their caring responsibilities in 2015. This number is expected to increase to 22,000 by 2030.



## ECONOMIC IMPACTS

### Lost personal income and savings

- In 2015, people who had left the labour force due to their arthritis received \$957 less each week in personal income than full-time workers without arthritis.
- At a national level this lost personal income was estimated to be \$1.8 billion in 2015 and is projected to increase to \$2.6 billion in 2030.
- The impact on personal savings and assets is substantial. By 2030, each person who has to leave the labour force due to their arthritis is expected to have \$432,000 less in total savings and assets than full-time workers without arthritis.

### Extra welfare payments and lost taxation revenue

- Extra annual welfare payments due to arthritis-related early retirement were \$635 million in 2015, and are projected to reach \$784 million in 2030.
- Lost annual taxation revenue was \$458 million in 2015 and is expected to rise to \$660 million in 2030.

### Impact on GDP

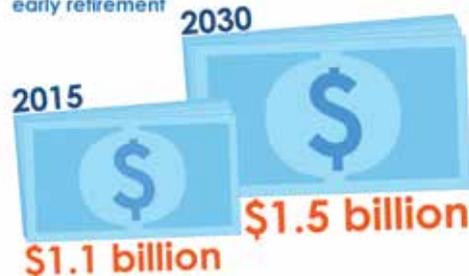
- In 2015, a loss of \$7.2 billion in GDP was estimated to be due to arthritis-related early retirement. By 2030, this loss of GDP will reach \$9.4 billion.

### Impact on Carers

- People who had to leave the workforce to care for someone with arthritis received just \$293 in median weekly income in 2015, which was only 23% of the median weekly income of non-carers employed full-time.
- They also received a median of \$246.70 in weekly welfare payments and on average, paid no tax.

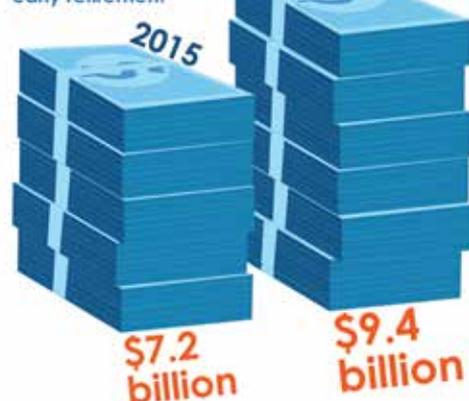
### Welfare costs + lost tax revenue

due to arthritis related early retirement



### Lost GDP

due to arthritis-related early retirement



### Economic benefits of non-surgical management programs for knee osteoarthritis

- 7,605 people were out of the workforce in 2015 due to knee osteoarthritis. If these people had received a dietary weight loss plus exercise intervention, 572 of them would have remained in the workforce. By 2030, this number would increase to 716 individuals.
- By 2030, the estimated aggregate economic benefit of this increased labour force participation would be \$33.5 million in increased personal income, and \$18.3 million in reduced welfare payments, and increased taxation revenue.