

# Burden of knee osteoarthritis costs predicted to almost double to \$370 million

October 4 2019, by Liane Topham-Kindley

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Public health measures to reduce obesity rates would help slow the rising burden of costs associated with knee osteoarthritis, projected to almost double to \$370 million by 2038.

That's the view of University of Otago researchers Professor Haxby

Abbott and Dr. Ross Wilson from the Centre for Musculoskeletal Outcomes Research, who have investigated the [healthcare costs](#) and demand for [knee replacement surgery](#) associated with [knee](#) osteoarthritis.

Osteoarthritis is a common and debilitating chronic disease and one of the leading causes of disability in New Zealand and worldwide. The pair estimate healthcare costs will increase from \$199 million in 2013 to \$370 million by 2038 due to population aging and increasing rates of obesity. The number of knee replacement surgeries over that same period is expected to increase from 5,070 to 9,040.

Total knee replacement surgery is a common and successful operation to reduce pain and improve the lifestyle of patients suffering from the disease. However, the surgery is only available for patients with advanced osteoarthritis and being a costly procedure, the large number of surgeries being carried out place strain on limited public healthcare resources, and capacity to provide more surgeries.

The scientists point out that effective, low-cost early interventions such as exercise therapy can alleviate symptoms, improve patients' quality of life and reduce the need for costly knee surgery.

Professor Abbott explains age and obesity are the two most important risk factors for knee osteoarthritis.

"An aging population and increasing rates of obesity are therefore expected to result in continuing increases in demand for osteoarthritis healthcare.

"Without changes in the provision of effective and cost-effective care throughout the disease course, the annual direct healthcare costs of knee osteoarthritis will increase by 85 percent to \$370 million by 2038 and an

additional 4000 knee replacement surgeries per year will be required."

The scientists warn however, that costs could be far greater as their modeling is based on the current costs of direct healthcare costs related to knee osteoarthritis. It does not take into account non-health related costs such as time off work, reduced productivity or informal care outside the health system.

Dr. Wilson says these costs may be substantial with a recent report on the costs of all types of arthritis in New Zealand finding that productivity losses associated with arthritis were 125 percent of direct health care costs and other non-health financial costs a further 202 percent of healthcare [costs](#).

They are therefore advocating for increased public health measures to reduce [obesity rates](#) which are projected to increase to close to 50 percent of the adult population by the late 2030s.

The research on the projected burden of [knee osteoarthritis](#) in New Zealand was published in the *New Zealand Medical Journal* today.

**More information:** The projected burden of knee osteoarthritis in New Zealand: healthcare expenditure and total joint replacement provision. *New Zealand Medical Journal*. [www.nzma.org.nz/journal/read-t...-4-october-2019/8008](http://www.nzma.org.nz/journal/read-t...-4-october-2019/8008)

Provided by University of Otago

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