Hip & knee replacement surgery in Canada

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Western Bone and Joint Institute

Disclosures

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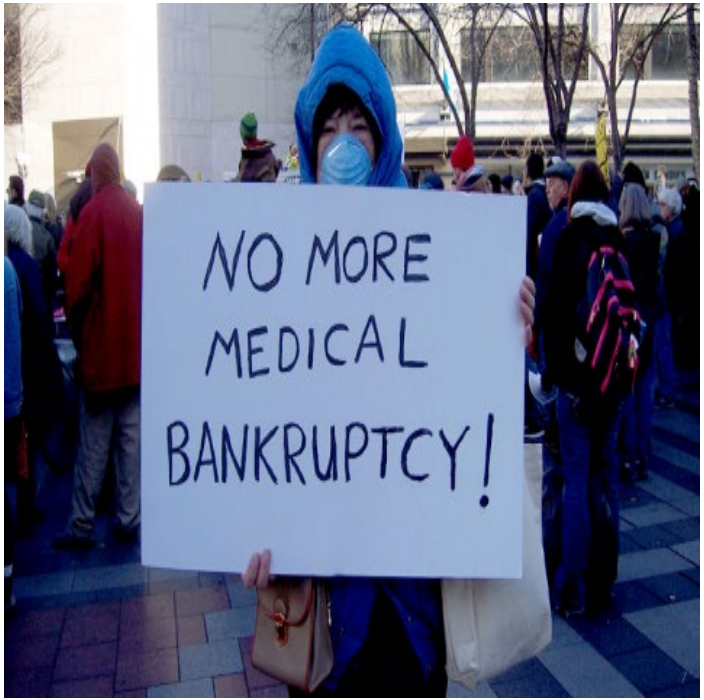
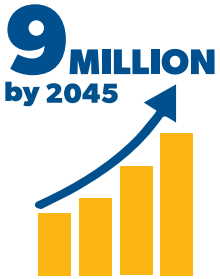
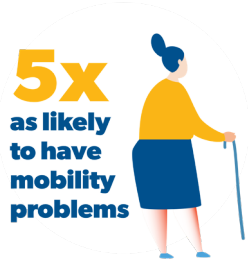
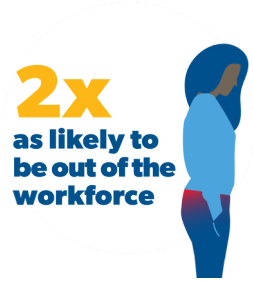

NO MORE
MEDICAL
BANKRUPTCY!

6 MILLION
Canadians with arthritis







90.9% of planned hip or knee replacement surgeries in Canada are for osteoarthritis

Source: Arthritis Society of Canada; Canadian Joint Replacement Registry

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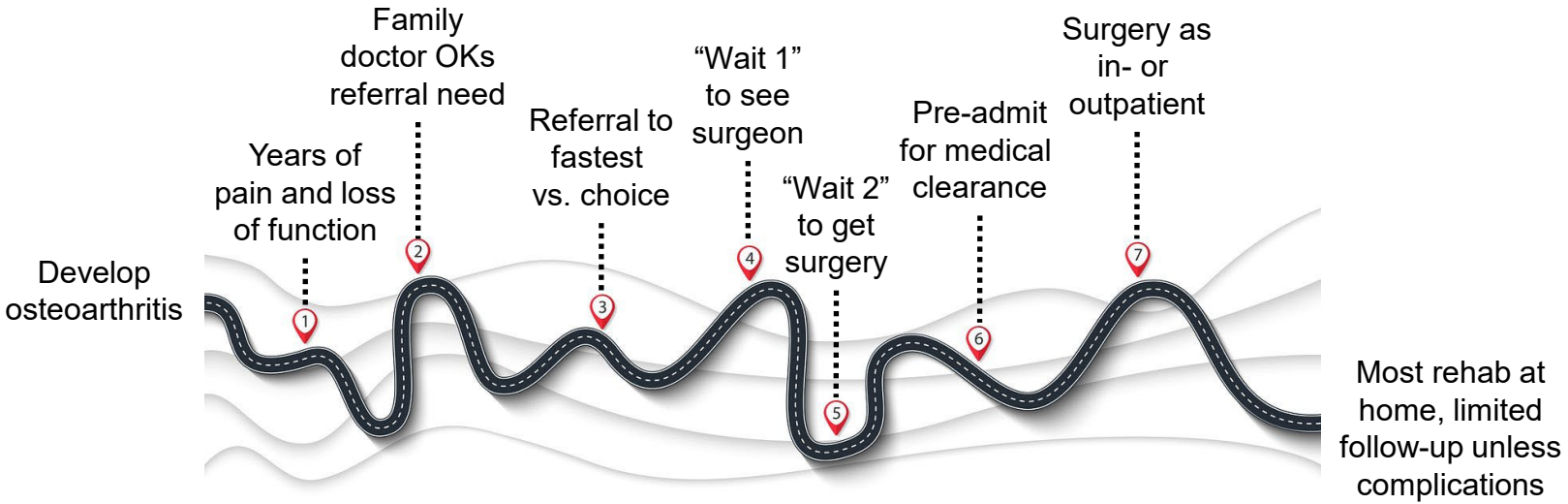


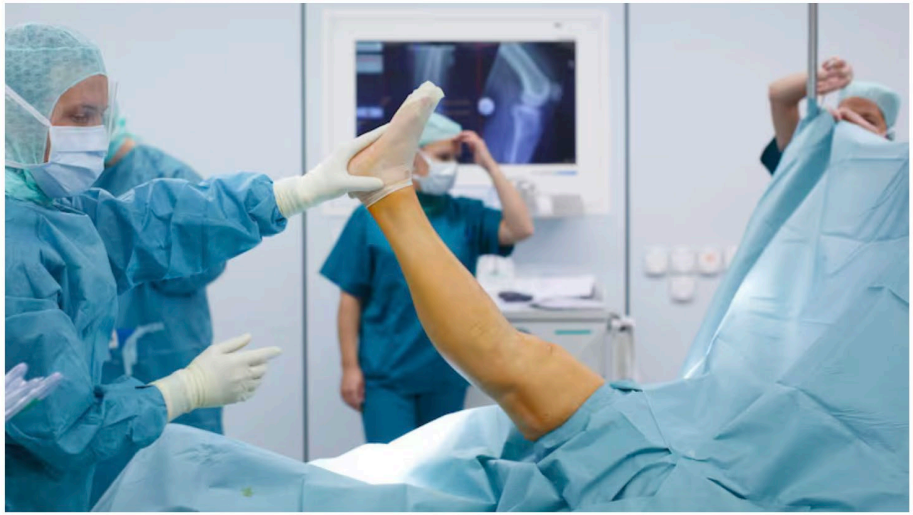
The patient's journey to total joint replacement

Health

Wait lists for hip, knee replacements, other priority procedures longer than before pandemic

Factors include catching up on delayed surgeries from the pandemic, aging population and capacity

The Canadian Press · Posted: Apr 04, 2024 3:59 PM EDT | Last Updated: April 4, 2024



Doctors and medical staff work during knee prosthesis surgery. About 59 per cent of people in Canada had the operation within the recommended time frame between April and September 2023, down from before the COVID-19 pandemic. (Michael Buholzer/Reuters)

Source: CBC News

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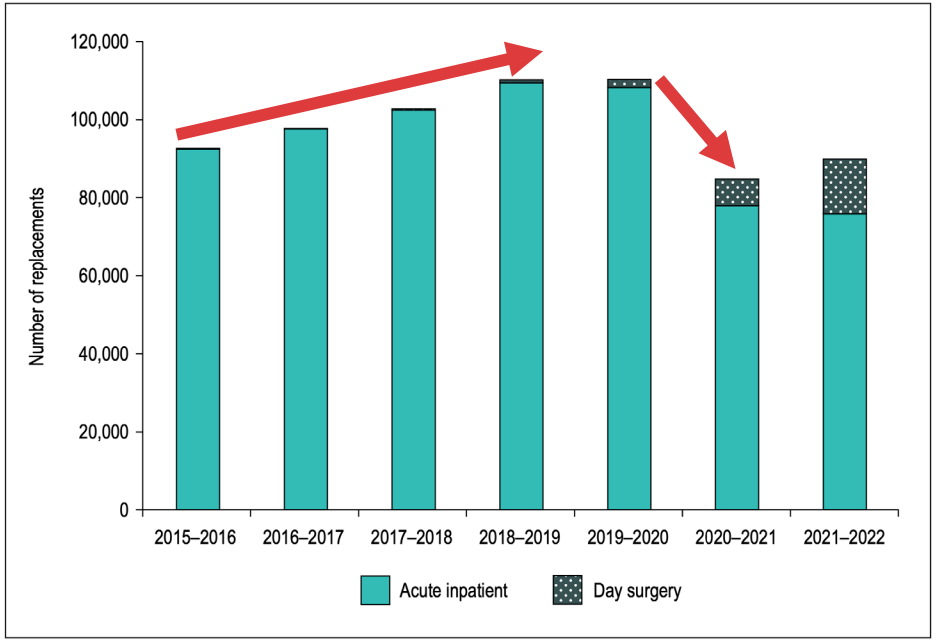
Figure 1 Number of hip and knee replacements for osteoarthritis by type of care, Canada, 2015–2016 to 2021–2022



Note
Includes hip and knee replacements with osteoarthritis as the most responsible diagnosis or main diagnosis.
Sources
Discharge Abstract Database–Hospital Morbidity Database and National Ambulatory Care Reporting System, 2015–2016 to 2021–2022, Canadian Institute for Health Information.

Drop in case volume:
Estimated 91,600 fewer surgeries than expected over past 3 years

Source: Canadian Joint Replacement Registry Annual Report 2021-22

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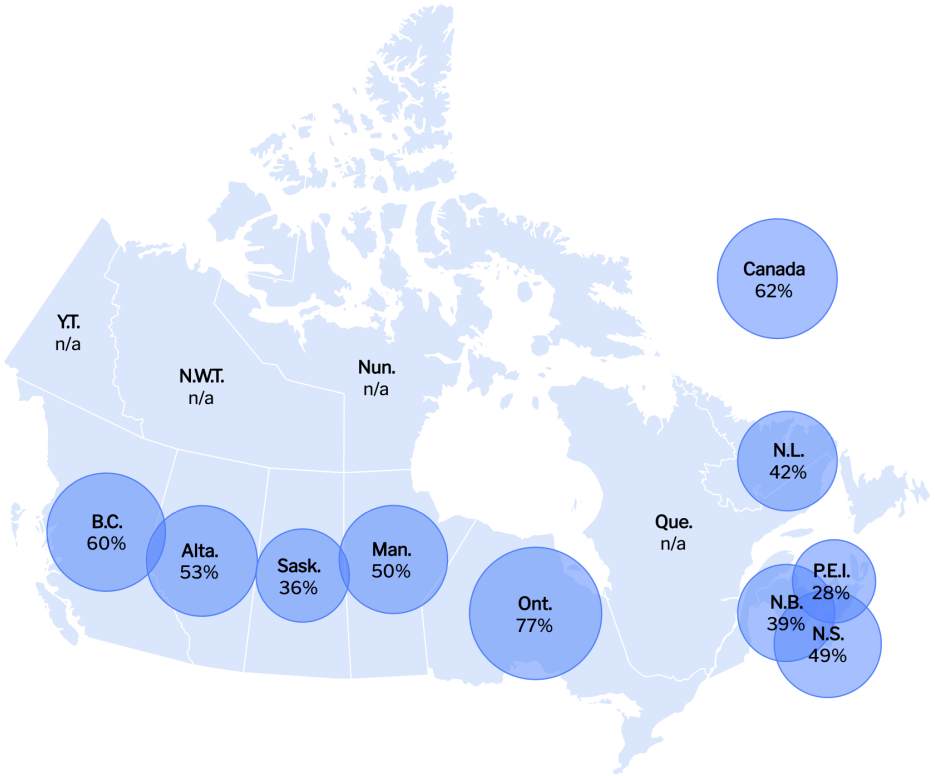
Percentage of joint replacements done within clinically acceptable wait times varied across Canada

Canadians who received joint replacements that met 26-week benchmark, 2023



Source: Canadian Institute for Health Information

Toronto

Surgical waits vary a lot between Ontario hospitals: study

Authors urge province to better co-ordinate waitlists for non-urgent surgery

Mike Crawley · CBC News · Posted: Aug 16, 2024 4:00 AM EDT | Last Updated: August 16, 2024

A new study analyzes the time patients in Ontario wait, from the doctor's decision to operate until the date of surgery, for five common non-emergency operations. (Turgut Yeter/CBC)

Source: CBC News

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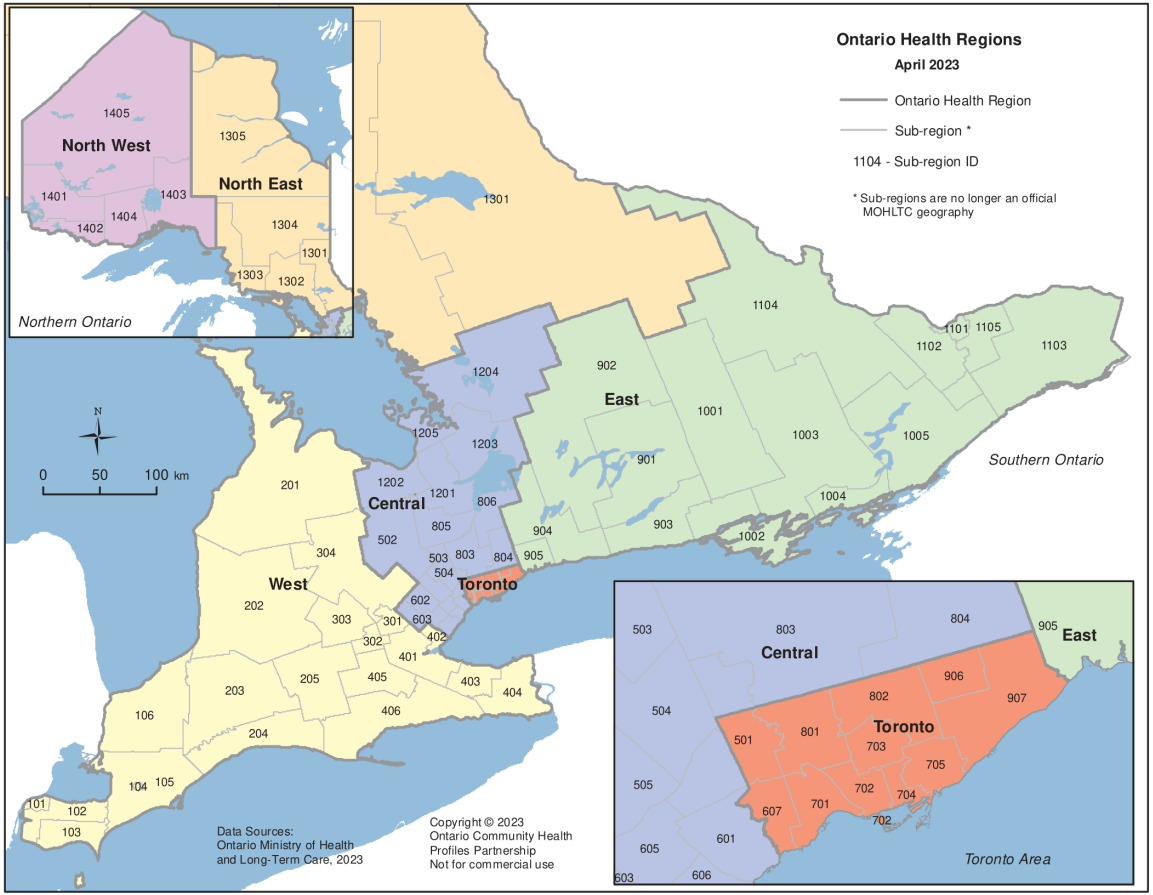
Ontario Health Regions
April 2023
Ontario Health Region
Sub-region *
1104 - Sub-region ID
* Sub-regions are no longer an official MOHLTC geography
North West
North East
Northern Ontario
Southern Ontario
East
Central
West
Toronto
Toronto Area
0 50 100 km
Data Sources:
Ontario Ministry of Health
and Long-Term Care, 2023
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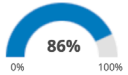
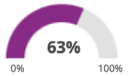
Time from referral to first clinician appointment (Wait 1)

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Patients who should be treated within a target time of **182 Days**	Patients who should be treated within a target time of **90 Days**	Patients who should be treated within a target time of **30 Days**

	Overall Wait 1	Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Ontario Provincial Average	 Patients seen within the target time	Waited on average **100 Days**	Waited on average **62 Days**	Waited on average **102 Days**
1 **London Hlth Sciences Ctr-University Hosp** 339 Windermere Road London, ON N6A5A5 **Distance:** 5.0 km	 Patients seen within the target time	Waited on average **166 Days**	Waited on average **74 Days**	Number too small to report
1 **St. Michael's Hospital** 30 Bond Street Toronto, ON M5B1W8 **Distance:** 0.9 km	 Patients seen within the target time	Waited on average **55 Days**	No surgeries in reporting period	No surgeries in reporting period

Source: Ontario Health

Time from decision to surgery (Wait 2)

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Patients who should be treated within a target time of **182 Days**	Patients who should be treated within a target time of **84 Days**	Patients who should be treated within a target time of **42 Days**

Ontario Provincial Average

Overall Wait 2: 74% (0% – 100%) Patients treated within target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **129 Days**	Waited on average **89 Days**	Waited on average **123 Days**

Wait 1 + Wait 2:
166 + 239 = 405 days

London Hlth Sciences Ctr-University Hosp
339 Windermere Road
London, ON N6A5A5
Distance: 5.0 km

Overall Wait 2: 47% (0% – 100%) Patients treated within target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **239 Days**	Waited on average **105 Days**	Number too small to report

Wait 1 + Wait 2:
55 + 101 = 156 days

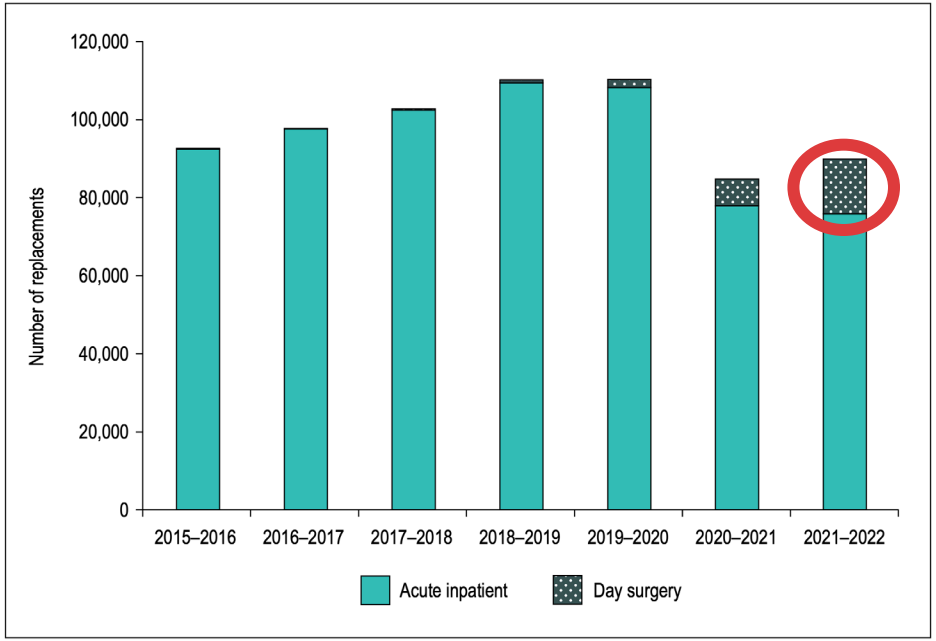
St. Michael's Hospital
30 Bond Street
Toronto, ON M5B1W8
Distance: 0.9 km

Overall Wait 2: 88% (0% – 100%) Patients treated within target time

Priority 4 Patients	Priority 3 Patients	Priority 2 Patients
Waited on average **101 Days**	Number too small to report	No surgeries in reporting period

Source: Ontario Health

Figure 1 Number of hip and knee replacements for osteoarthritis by type of care, Canada, 2015–2016 to 2021–2022



Note
Includes hip and knee replacements with osteoarthritis as the most responsible diagnosis or main diagnosis.
Sources
Discharge Abstract Database–Hospital Morbidity Database and National Ambulatory Care Reporting System, 2015–2016 to 2021–2022, Canadian Institute for Health Information.

Growth of outpatient surgery:
Increased from 0.2% of surgeries in 2015-16 to 15.6% in 2021-22

Source: Canadian Joint Replacement Registry Annual Report 2021-22

Western Bone and Joint Institute

DR. JAMES HOWARD AND DR. BRENT LANTING RECEIVE PRESIDENT'S AWARD FOR INNOVATION

Congratulations to Drs. Brent Lanting and James Howard of the Division of Orthopaedic Surgery on receiving the President's Award for Innovation.

The President's Award for Innovation recognizes Drs. Howard and Lanting's collaborative approach in developing the framework for the innovative anterior approach surgical technique.

The anterior approach technique for hip replacement results in faster and more effective recovery for patients as it uses one small incision on the front of the hip. Often patients are able to return home following only an overnight stay in hospital, or in some cases, the same day.

Further information about the London Health Sciences Centre President's Awards program is available at www.lhsc.on.ca

DR. JAMES HOWARD RECEIVES HIS AWARD FROM MURRAY GLENDINING, PRESIDENT AND CHIEF EXECUTIVE OFFICER, LONDON HEALTH SCIENCES CENTRE. PHOTO BY LHSC CORPORATE COMMUNICATIONS & PUBLIC RELATIONS

DR. BRENT LANTING RECEIVES HIS AWARD FROM MURRAY GLENDINING, PRESIDENT AND CHIEF EXECUTIVE OFFICER, LONDON HEALTH SCIENCES CENTRE. PHOTO BY LHSC CORPORATE COMMUNICATIONS & PUBLIC RELATIONS

News / Local News

LHSC's innovative off-site surgical centre to triple in size

Jack Moulton

Published Jan 16, 2025 • 2 minute read

Join the conversation

Dr. Abdel-Rahman Lawendy, left, explains his operating room setup at the Nazem Kadri surgical centre at London Health Sciences Centre to deputy premier and Health Minister Sylvia Jones and Elgin-Middlesex-London Progressive Conservative MPP Rob Flack on Thursday, Jan. 16, 2025, after Jones announced provincial funding for an expansion of the centre. (Mike Hensen/The London Free Press)

Source: London Free Press

Western Bone and Joint Institute

Toronto

Why these doctors support Doug Ford's plan for private surgical clinics

Ontario expanding OHIP-covered procedures done outside hospitals, including hip and knee replacements, MRIs

Mike Crawley · CBC News · Posted: Feb 15, 2024 4:00 AM EST | Last Updated: February 15, 2024

Dr. David Jacobs, left, is a radiologist, Dr. Brian Rotenberg, centre, is an ear. nose and throat surgeon, and Dr. Bob Litchfield, right, is an orthopedic surgeon. (Camilla Pucholt, Submitted by Brian Rotenberg, Fares Uddin)

Source: CBC News

Who is (or isn't) eligible for outpatient surgery?

Your surgeon will consider a variety of factors to determine whether outpatient hip, knee, or shoulder replacement surgery is safe for you including:

- Your age.
- Major medical issues such as severe heart failure, chronic obstructive pulmonary disease (COPD), obstructive sleep apnea, kidney failure, or dialysis increase the risk of complications and require close monitoring after surgery. As a result, if you have one or more of these issues, it may be safer for you to have your procedure performed in a hospital setting.
- Your ability to walk and move around independently without a cane or walker.
- Your home support system — a strong support system is essential for your safe discharge home and to ensure that you can get to your physical therapy appointments.

Source: OrthoInfo, American Academy of Orthopaedic Surgeons

BUSINESS

As more cataract surgeries move to private clinics, more low-income Ontarians are being left behind, study finds

Canadian Medical Association Journal finds poorest Ontarians are less likely to access cataract surgeries in the province's private, for-profit surgical centres.

Updated Oct. 22, 2024 at 5:52 p.m. | Aug. 26, 2024 | 3 min read

Study lead author Dr. Robert Campbell and colleagues found that after the onset of COVID, the proportion of cataract procedures in private clinics rose by 50 per cent. "That's definitely a large jump."

Source: Toronto Star

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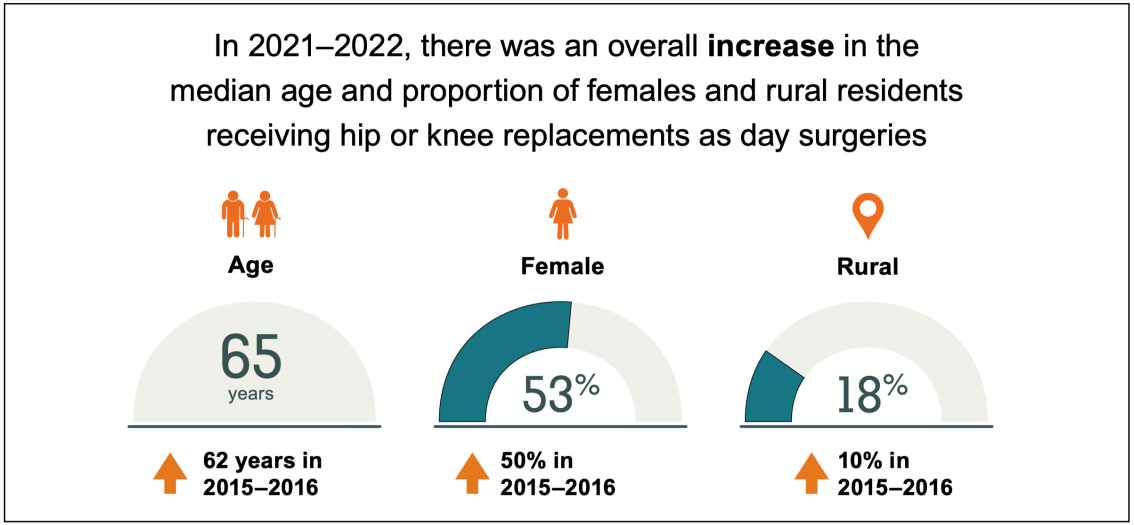
Figure 3 Selected demographic characteristics of patients having hip or knee replacements as day surgeries, 2021–2022 compared with 2015–2016



Note

Includes hip and knee replacements submitted as day surgeries and with osteoarthritis as the most responsible diagnosis or main diagnosis.

Sources

Discharge Abstract Database–Hospital Morbidity Database and National Ambulatory Care Reporting System, 2015–2016 to 2021–2022, Canadian Institute for Health Information.

THE BONE & JOINT JOURNAL EST. 1948

■ ARTHROPLASTY

‘Worse than death’ and waiting for a joint arthroplasty

C. E. H. Scott,
D. J. MacDonald,
C. R. Howie

From Royal Infirmary of Edinburgh, Edinburgh, United Kingdom

Aims

The EuroQol five-dimension (EQ-5D) questionnaire is a widely used multiattribute general health questionnaire where an EQ-5D < 0 defines a state ‘worse than death’ (WTD). The aim of this study was to determine the proportion of patients awaiting total hip arthroplasty (THA) or total knee arthroplasty (TKA) in a health state WTD and to identify associations with this state. Secondary aims were to examine the effect of WTD status on one-year outcomes.

Patients and Methods

A cross-sectional analysis of 2073 patients undergoing 2073 THAs (mean age 67.4 years (SD 11.6; 14 to 95); mean body mass index (BMI) 28.5 kg/m² (SD 5.7; 15 to 72); 1253 female (60%)) and 2168 patients undergoing 2168 TKAs (mean age 69.3 years (SD 9.6; 22 to 91); BMI 30.8 kg/m² (SD 5.8; 13 to 57); 1244 female (57%)) were recorded. Univariate analysis was used to identify variables associated with an EQ-5D score < 0: age, BMI, sex, deprivation quintile, comorbidities, and joint-specific function measured using the Oxford Hip Score (OHS) or Oxford Knee Score (OKS). Multivariate logistic regression was performed. EQ-5D and OHS/OKS were repeated one year following surgery in 1555 THAs and 1700 TKAs.

Results

Preoperatively, 391 THA patients (19%) and 263 TKA patients (12%) were WTD. Multivariate analysis identified preoperative OHS, deprivation, and chronic obstructive pulmonary disease in THA, and OKS, peripheral arterial disease, and inflammatory arthropathy in TKA as independently associated with WTD status ($p < 0.05$). One year following arthroplasty EQ-5D scores improved significantly ($p < 0.001$) and WTD rates reduced to 35 (2%) following THA and 53 (3%) following TKA. Patients who were WTD preoperatively achieved significantly ($p < 0.001$) worse joint-specific Oxford scores and satisfaction rates one year following joint arthroplasty, compared with those not WTD preoperatively.

Conclusion

In total, 19% of patients awaiting THA and 12% awaiting TKA for degenerative joint disease are in a health state WTD. Although specific comorbidities contribute to this, hip- or knee-specific function, mainly pain, appear key determinants and can be reliably reversed with an arthroplasty.

Cite this article: *Bone Joint J* 2019;101-B:941–950.

THE BONE & JOINT JOURNAL EST. 1948

■ ARTHROPLASTY

The number of patients "worse than death" while waiting for a hip or knee arthroplasty has nearly doubled during the COVID-19 pandemic

A UK NATIONWIDE SURVEY

N. D. Clement, C. E. H. Scott, J. R. D. Murray, C. R. Howie, D. J. Deehan, IMPACT-Restart Collaboration*

From the IMPACT-Restart Collaboration, UK

Aims

The aim of this study was to assess the quality of life of patients on the waiting list for a total hip (THA) or knee arthroplasty (KA) during the COVID-19 pandemic. Secondary aims were to assess whether length of time on the waiting list influenced quality of life and rate of deferral of surgery.

Methods

During the study period (August and September 2020) 843 patients (THA n = 394, KA n = 449) from ten centres in the UK reported their EuroQol five dimension (EQ-5D) scores and completed a waiting list questionnaire (2020 group). Patient demographic details, procedure, and date when listed were recorded. Patients scoring less than zero for their EQ-5D score were defined to be in a health state "worse than death" (WTD). Data from a retrospective cohort (January 2014 to September 2017) were used as the control group.

Results

The 2020 group had a significantly worse EQ-5D score compared to the control group for both THA ($p < 0.001$) and KA ($p < 0.001$). Over one-third (35.0%, n = 138/394) of patients waiting for a THA and nearly a quarter (22.3%, n = 100/449) for KA were in a health state WTD, which was significantly greater than the control group (odds ratio 2.30 (95% confidence interval (CI) 1.83 to 2.93) and 2.08 (95% CI 1.61 to 2.70), respectively; $p < 0.001$). Over 80% (n = 680/843) of the 2020 group felt that their quality of life had deteriorated while waiting. Each additional month spent on the waiting list was independently associated with a decrease in quality of life (EQ-5D: -0.0135, p = 0.004). There were 117 (13.9%) patients who wished to defer their surgery and the main reason for this was health concerns for themselves and or their family (99.1%, n = 116/117).

Conclusion

Over one-third of patients waiting for THA and nearly one-quarter waiting for a KA were in a state WTD, which was approaching double that observed prior to the pandemic. Increasing length of time on the waiting list was associated with decreasing quality of life.

Level of evidence: Level III retrospective case control study

Cite this article: ***Bone Joint J*** **2021;103-B(4):672–680.**

THE BONE & JOINT JOURNAL EST. 1948

■ ARTHROPLASTY

Patient health-related quality of life deteriorates significantly while waiting six to 12 months for total hip or knee arthroplasty

A PROSPECTIVE LONGITUDINAL STUDY

C. E. H. Scott,
L. Z. Yapp,
D. J. MacDonald,
C. R. Howie,
N. D. Clement

From Royal Infirmary of Edinburgh, Edinburgh, UK

Aims

The primary aim was to assess change in health-related quality of life (HRQoL) of patients as they waited from six to 12 months for a total hip (THA) or total or partial knee arthroplasty (KA). Secondary aims were to assess change in joint-specific function, mental health, quality of sleep, number living in a state worse than death (WTD), wellbeing, and patient satisfaction with their healthcare.

Methods

This prospective study included 142 patients awaiting a THA (mean age 66.7 years (SD 11.4); 71 female) and 214 patients awaiting KA (mean age 69.7 years (SD 8.7); 117 female). Patients completed questionnaires (EuroQol five-dimension health questionnaire (EQ-5D), Oxford Hip and Knee Scores (OHS/OKS), Pittsburgh Sleep Quality Index (PSQI), Hospital Anxiety and Depression Score (HADS), University of California, Los Angeles Activity Scale, wellbeing assessment, and satisfaction with their healthcare) at six and 12 months while awaiting surgery.

Results

There was a clinical and statistically significant deterioration in the EQ-5D while awaiting THA (mean change 0.071 (95% confidence interval (CI) 0.018 to 0.124); $p = 0.009$) and KA (mean change 0.069 (95% CI 0.032 to 0.106); $p < 0.001$). For patients awaiting a THA, there were deteriorations in OHS ($p = 0.003$), PSQI ($p = 0.008$), both HADS depression ($p = 0.001$) and anxiety ($p = 0.002$), and an increased prevalence in those in a state WTD ($p = 0.010$). For those awaiting KA, there were significant deteriorations in OKS ($p < 0.001$), UCLA ($p = 0.001$), and HADS depression ($p < 0.001$) and anxiety ($p < 0.001$). There were significant decreases in wellbeing (satisfaction with life, feeling life to be worthwhile, and happiness) and increases in anxiety for those awaiting THA or KA ($p < 0.001$). Those awaiting THA (odds ratio (OR) 0.52 (95% CI 0.31 to 0.89); $p = 0.016$) and KA (OR 0.46 (95% CI 0.31 to 0.71); $p < 0.001$) had a significant decrease in satisfaction with their healthcare.

Conclusion

As patients waited from six to 12 months for THA or KA, they experienced a clinically significant deterioration in HRQoL. There were also deteriorations in joint-specific function, mental health, wellbeing, and patient satisfaction with healthcare.

Cite this article: *Bone Joint J* 2024;106-B(2):166–173.

London | News

Four robots at LHSC could be a game changer for joint replacement surgery

By Bailey Shakyaver

Published: September 12, 2024 at 11:27AM EDT

Groundbreaking new technology is now available at London Health Sciences Centre.

Source: CTV News

Kevin O'Leary aka Mr. Wonderful
@kevinolearytv

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32 years of competitive #squashcompetition killed my right hip. I did the #surgery yesterday. I could of done this procedure anywhere, I chose Dr. Sebastian Rodriguez and his team at Humber River Hospital @cityoftoronto because of their #technology and track record. I waked un-assisted 48 min after I woke up!

Key issues

1. Wait times are highly variable by region within provinces as well as between provinces
2. Outpatient surgery (public or private) reduces waits, but is not accessible to all
3. Waiting for joint replacement is not benign
4. Cutting-edge technologies like robotics tend to be in urban, academic centres

If you are a low-income rural Ontarian with multiple comorbidities,
your care journey towards a total joint replacement
will look very different from a healthy, high-income urbanite

boneandjoint.uwo.ca

matthew.teeter@uwo.ca

Western Bone and Joint Institute