

Hip and knee replacement

Significant advances in surgical treatment have provided effective options to reduce the pain and disability associated with certain musculoskeletal conditions. Joint replacement surgery (hip and knee replacement) is considered the most effective intervention for severe osteoarthritis and hip fractures, reducing pain and disability and restoring some patients to near normal function.

Osteoarthritis is one of the ten most disabling diseases in developed countries. Worldwide, estimates show that 10% of men and 18% of women aged over 60 years have symptomatic osteoarthritis, including moderate and severe forms (WHO, 2014). Age is the strongest predictor of the development and progression of osteoarthritis. It is more common in women, increasing after the age of 50 especially in the hand and knee. Other risk factors include obesity, physical inactivity, smoking, excessive alcohol consumption and injuries. While joint replacement surgery is mainly carried out among people aged 60 and over, it can also be performed on people at younger ages.

In 2015, Switzerland, Germany, Austria and Belgium had the highest rates for both of hip and knee replacement (Figures 9.16 and 9.17). In Mexico and Chile, the rates of hip and knee replacement are particularly low, with less than 40 hip replacements and less than 10 knee replacements per 100 000 population. Differences in population structure may explain part of this variation across countries, and age standardisation reduces it to some extent. Still, large differences persist and the country ranking does not change significantly after age standardisation (McPherson et al., 2013; OECD 2014).

National averages can mask important variation in hip and knee replacement rates within countries. In Australia, Canada, Germany, France and Italy, the rate of knee replacement is more than two times higher in certain regions compared with others, even after age-standardisation (OECD, 2014).

The number of hip and knee replacements has increased rapidly since 2000 in most OECD countries (Figures 9.18 and 9.19). On average, the rate of hip replacement increased by 30% between 2000 and 2015 and the rate of knee replacement nearly doubled. For hip replacement, most OECD countries show increasing trends of varying degrees, but countries like Ireland and Portugal show much slower growth than the average, with Ireland being the only OECD country to show a decrease in hip replacement rates from

2000. Similarly, knee surgeries have seen a large increase in the past decades in all OECD countries, with the exception of Chile and Estonia, which showed small decreases in the past few years.

Definition and comparability

Hip replacement is a surgical procedure in which the hip joint is replaced by a prosthetic implant. It is generally conducted to relieve arthritis pain or treat severe physical joint damage following hip fracture.

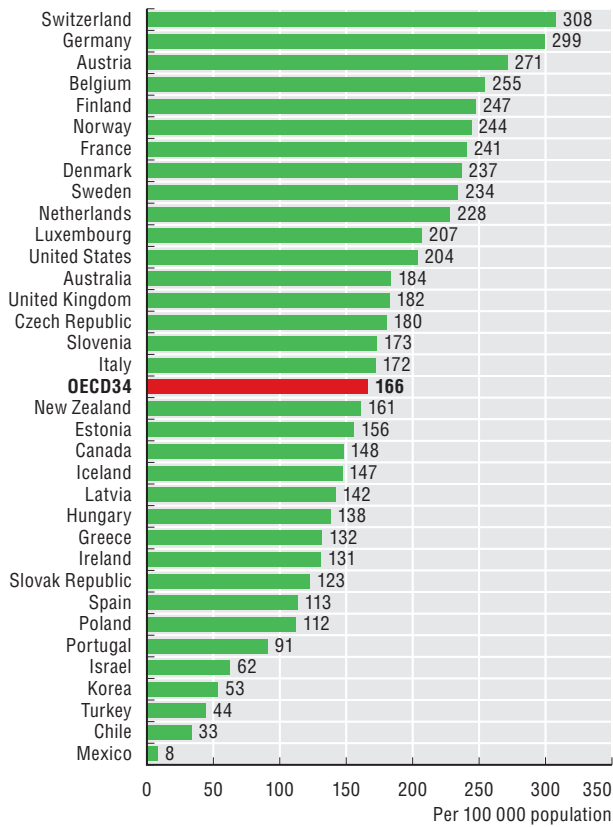
Knee replacement is a surgical procedure to replace the weight-bearing surfaces of the knee joint in order to relieve the pain and disability of osteoarthritis. It may also be performed for other knee diseases such as rheumatoid arthritis.

Classification systems and registration practices vary across countries, which may affect the comparability of the data. While most countries include both total and partial replacement, some countries only include total hip replacement. In Ireland, Mexico, New Zealand and the United Kingdom, the data only include activities in publicly-funded hospitals, therefore underestimating the number of total procedures presented here (for example, approximately 15% of all hospital activity in Ireland is undertaken in private hospitals). Data for Portugal relate only to public hospitals on the mainland. Data for Spain only partially include activities in private hospitals.

References

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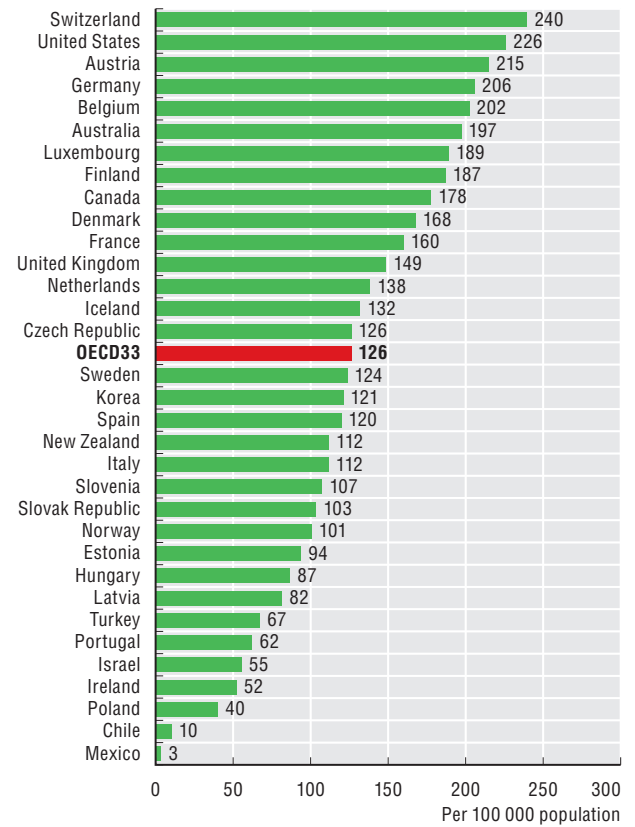
9.16. Hip replacement surgery, 2015 (or nearest year)



Source: OECD Health Statistics 2017.

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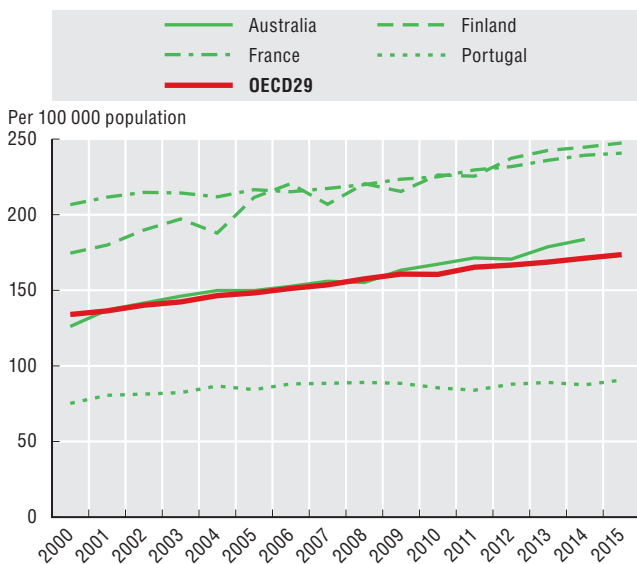
9.17. Knee replacement surgery, 2015 (or nearest year)



Source: OECD Health Statistics 2017.

StatLink <http://dx.doi.org/10.1787/888933605255>

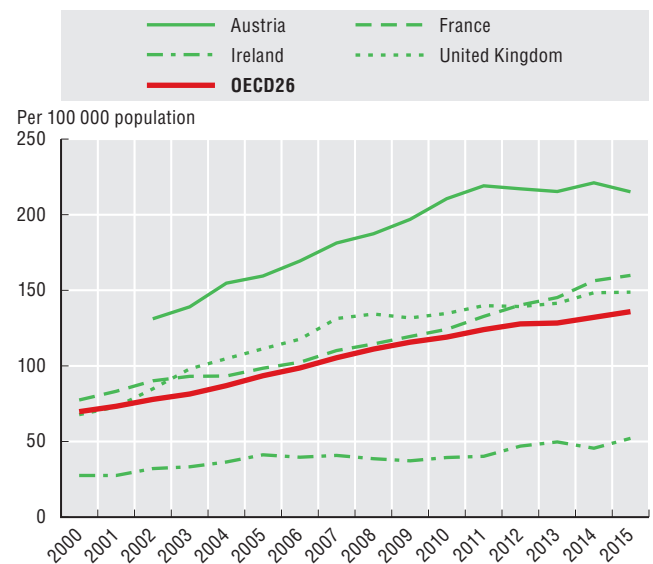
9.18. Hip replacement surgery trends, 2000 to 2015 (or nearest year)



Source: OECD Health Statistics 2017.

StatLink <http://dx.doi.org/10.1787/888933605274>

9.19. Knee replacement surgery trends, 2000 to 2015 (or nearest year)



Source: OECD Health Statistics 2017.

StatLink <http://dx.doi.org/10.1787/888933605293>



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