

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, 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, excess alcohol and injuries. While joint replacement surgery is mainly carried out among people aged 60 and over, it can also be performed among people at younger ages.

In 2013, Switzerland, Germany and Austria had the highest rates of hip replacement, while the United States had the highest rate of knee replacement, followed by Austria, Finland and Germany (Figures 6.18 and 6.19). Differences in population structure may explain part of these variations across countries, and age standardisation reduces to some extent the cross-country variations. 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 variations 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 6.20 and 6.21). On average, the rate of hip replacement increased by about 35% between 2000 and 2013 and the rate of knee replacement nearly doubled. In France, the growth rate for both interventions was slightly lower, but still the hip replacement rate increased by about 15% while the knee replacement rate rose by nearly 90% between 2000

and 2013. In Germany, these surgical activity rates appear to have stabilised in recent years and even come down slightly in 2013.

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.

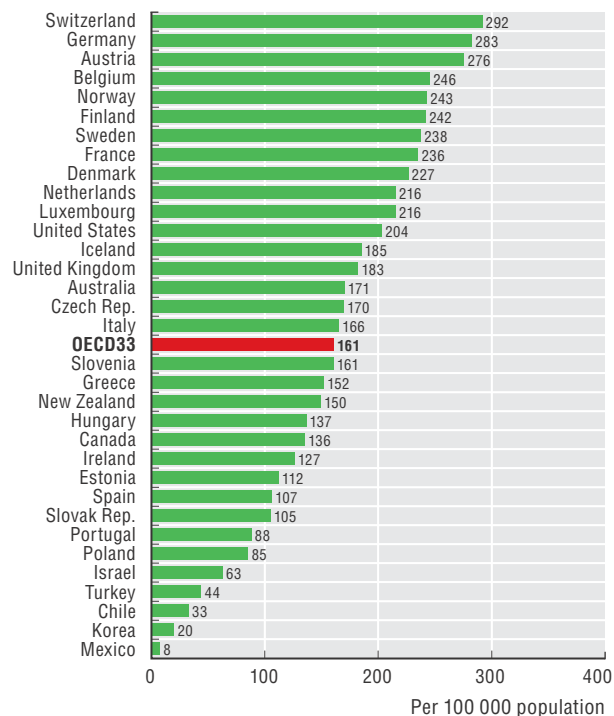
Knee replacement is a surgical procedure to replace the weight-bearing surfaces of the knee joint in order to relieve the pain and disability of osteoarthritis. It may also be performed for other knee diseases such as rheumatoid arthritis.

Classification systems and registration practices vary across countries, which may affect the comparability of the data. Some countries only include total hip replacement (e.g. Estonia), while most countries also include partial replacement. In Ireland, Mexico, New Zealand and the United Kingdom, the data only include activities in publicly-funded hospitals (it is estimated that approximately 15% of all hospital activity 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

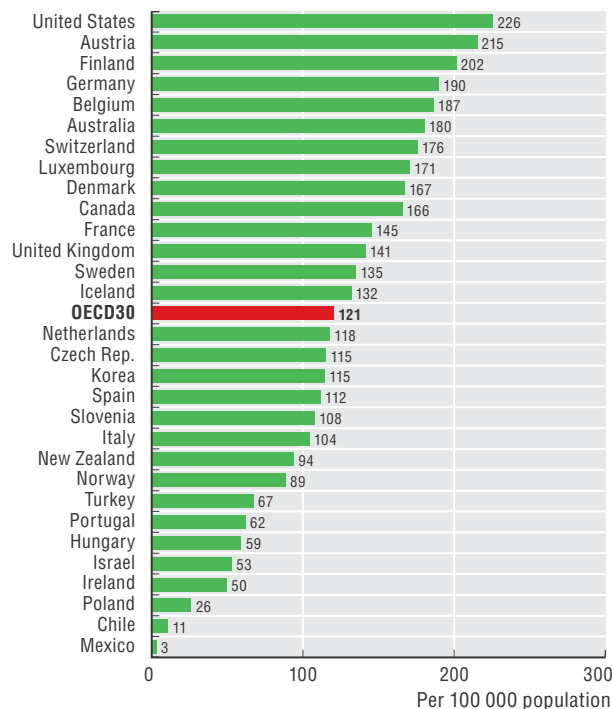
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6.18. Hip replacement surgery, 2013 (or nearest year)



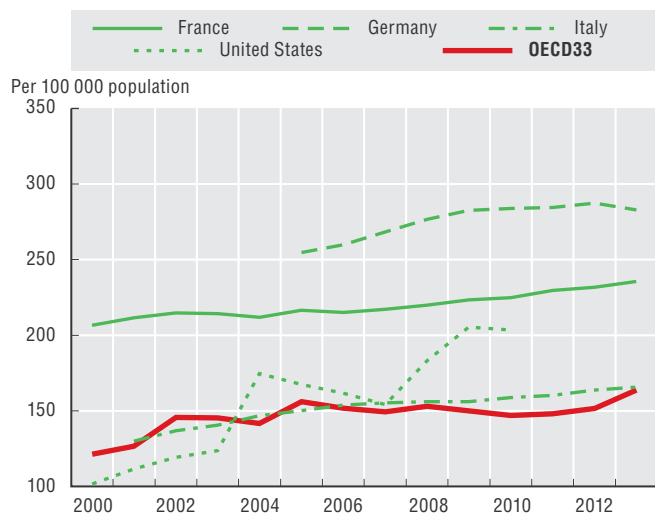
Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888933281026>

6.19. Knee replacement surgery, 2013 (or nearest year)



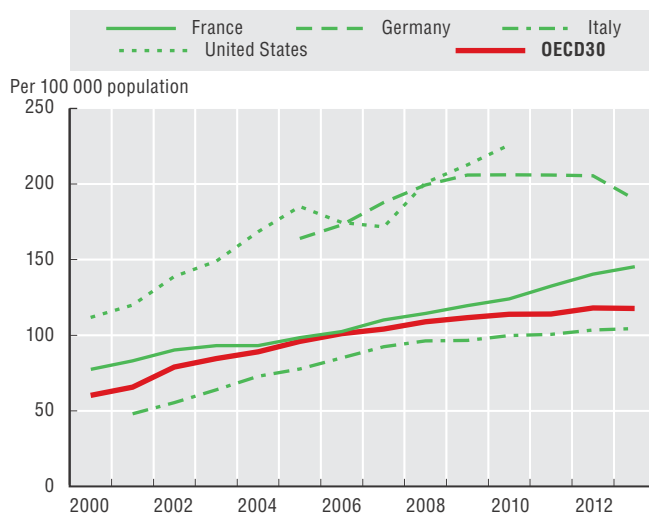
Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888933281026>

6.20. Trend in hip replacement surgery, selected OECD countries, 2000 to 2013 (or nearest years)



Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888933281026>

6.21. Trend in knee replacement surgery, selected OECD countries, 2000 to 2013 (or nearest years)



Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.
StatLink <http://dx.doi.org/10.1787/888933281026>

Information on data for Israel: <http://oe.cd/israel-disclaimer>



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