

Hip and knee surgery

Hip fractures are a common cause of hospitalisation, typically caused by falls particularly among those with loss of skeletal strength from osteoporosis.

In nearly all instances following a hip fracture, surgical intervention is required to repair or replace the hip joint. There is general agreement that early surgical intervention improves patient outcomes and minimises the risk of complications. For this reason, surgery should occur within two days (48 hours) of hospitalisation. Some national guidelines stipulate an even more rapid intervention. In the United Kingdom, the National Institute for Health and Care Excellence (NICE) clinical guidelines recommend that hip fracture surgery be performed on the day of hospital admission or the next day (NICE, 2017^[1]).

Time to surgery is influenced by many factors, including hospitals' surgical and staffing capacity and inter-hospital flow and access (e.g. timely discharges creating hospital capacity for new patients). In 2019, three out of four patients aged 65 and over on average across EU countries underwent surgery within two days following admission with a hip fracture, with most of them being treated either on the same day of admission or the next day (Figure 6.18). In Denmark and the Netherlands, the proportion of patients operated within two days reached more than 95%. By contrast, less than half of patients aged 65 and over were operated within two days following their admission for a hip fracture in Latvia and Portugal.

Osteoarthritis is a growing cause of disability in Europe due to population ageing and the growing prevalence of obesity. It often requires hip or knee joint replacement surgery if symptoms persist after exhausting non-surgical treatment such as physical therapy and weight loss. Patient-reported outcome measures (PROMs) can be used to assess the effect of a joint replacement surgery from the patient's perspective by using instruments such as the Oxford Hip/Knee Score and the Hip/Knee Disability and Osteoarthritis Outcome Score – Physical Short Form (HOOS-PS/KOOS-PS). A higher score denotes better function and reduced level of pain for Oxford Scores and better function for HOOS-PS and KOOS-PS.

Figure 6.19 shows the average improvement on the Oxford Hip Score (left) and HOOS-PS (right) scales reported by patients after elective hip replacement surgery for osteoarthritis across selected joint replacement registries. Results have been adjusted for preoperative score, age and sex. The average mean adjusted change was 21 points out of a 48-point scale on the Oxford Hip Score and 33 points out of a 100-point scale on the HOOS-PS scale.

Figure 6.20 shows the adjusted mean improvement reported by patients using the Oxford Knee Score (left) and KOOS-PS (right) after elective knee replacement surgery for osteoarthritis. The average mean adjusted change was 18 points out of a 48-point scale on the Oxford Knee Score and 21 points out of a 100-point scale on the KOOS-PS.

Definition and comparability

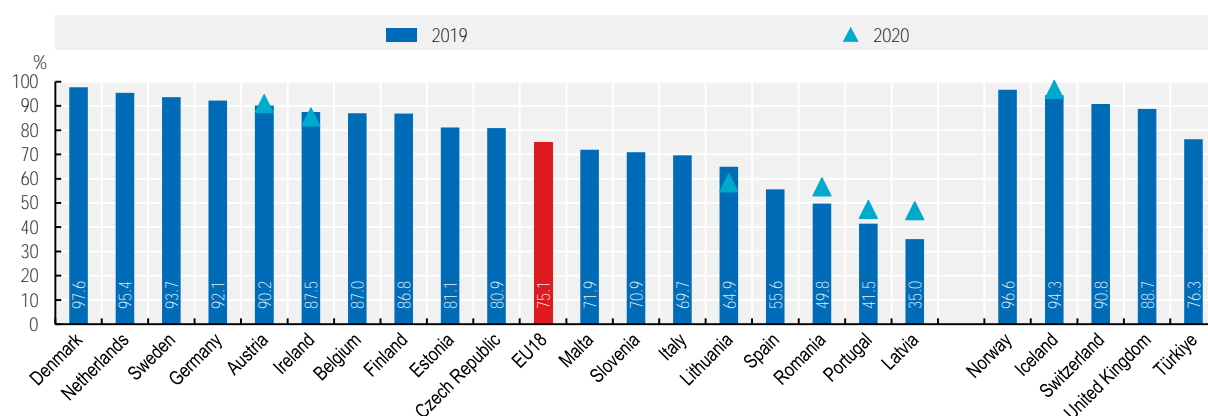
The indicator of waiting times for surgery following admission for a hip fracture is defined as the proportion of patients aged 65 years and over admitted to hospital in a specified year with a diagnosis of upper femur fracture, who had surgery initiated within two calendar days of their admission to hospital. The capacity to capture time of admission and surgery in hospital administrative data varies across countries. While cases where the hip fracture occurred during admission to hospital should be excluded, not all countries have a "present on admission" flag in their datasets to enable them to identify such cases accurately.

PROMs are based on data from registries in countries using data on adult patients undergoing elective hip or knee replacement surgery with a principal diagnosis of osteoarthritis. A higher score denotes better outcomes on all these scales (Kendir et al., 2022^[2]).

References

- Kendir, C. et al. (2022), "International assessment of the use and results of patient-reported outcome measures for hip and knee replacement surgery: Findings of the OECD Patient-Reported Indicator Surveys (PaRIS) working group on hip and knee replacement surgery", *OECD Health Working Papers*, No. 148, OECD Publishing, Paris, <https://doi.org/10.1787/6da7f06b-en>. [2]
- NICE (2017), "Hip Fracture: The Management of Hip Fracture in Adults", *NICE Clinical Guideline No. 124*, issued June 2011, last updated May 2017. [1]

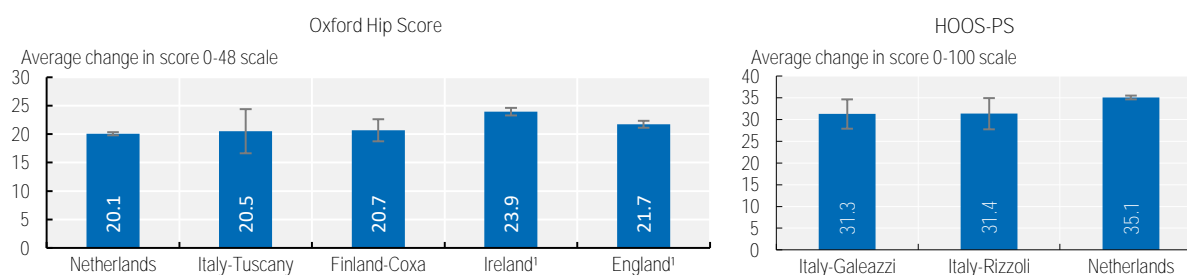
Figure 6.18. Hip fracture surgery initiation for patients aged 65 and over within two days of admission, 2019 (or nearest year) and 2020



Note: The EU average is unweighted.
Source: OECD Health Statistics 2022.

StatLink  <https://stat.link/dujyv5>

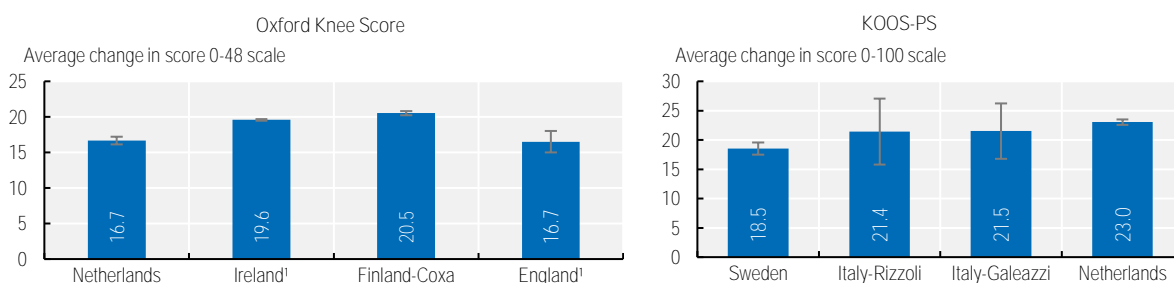
Figure 6.19. Improvement in patient-reported hip replacement outcomes, 2020 (or nearest year)



Note: H lines show 95% confidence intervals. 1. Postoperative collection at 6 months (all others at 12 months).
Source: PaRIS Hip/Knee Replacement Pilot Data Collection, 2020-21.

StatLink  <https://stat.link/e2m11v>

Figure 6.20. Improvement in patient-reported knee replacement outcomes, 2020 (or nearest year)



Note: H lines show 95% confidence intervals. 1. Postoperative collection at 6 months (all others at 12 months).
Source: PaRIS Hip/Knee Replacement Pilot Data Collection, 2020-21.

StatLink  <https://stat.link/rtvl1z>



From:

Health at a Glance: Europe 2022

State of Health in the EU Cycle

Access the complete publication at:

<https://doi.org/10.1787/507433b0-en>

Please cite this chapter as:

OECD/European Union (2022), “Hip and knee surgery”, in *Health at a Glance: Europe 2022: State of Health in the EU Cycle*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/c3ce8219-en>

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