Patient-reported outcomes in acute care

Patient-reported measures have become essential tools to improve healthcare quality and ensure people-centred care. Patient-reported outcome measures (PROMs) are often used as an indicator of the quality of care, including acute care such as hip and knee replacement surgery. They are used to monitor and promote delivery of patient-centred care as they provide information about patients' perception of the quality of healthcare, such as whether the care they received met their individual goals and needs. Given the increasing importance of measuring PROMs to assess the quality of care in recent years, the number of people responding to PROMs requests in relation to hip and knee replacement surgery has increased across countries, even during the COVID-19 pandemic when the volume of surgeries declined (OECD, forthcoming[1]).

Figure 6.27 shows changes between the pre-operative and post-operative scores on the Oxford Hip Score (OHS) and Hip Disability and Osteoarthritis Outcome Score – Physical Short Form (HOOS-PS) scales reported by patients after elective hip replacement surgery for osteoarthritis, which are available in joint replacement registries across countries. Figure 6.28 shows changes between the pre-operative and post-operative scores reported by patients using the Oxford Knee Score (OKS) and Knee Injury and Osteoarthritis Outcome Score – Physical Short Form (KOOS-PS) after elective knee replacement surgery for osteoarthritis. Figure 6.29 shows quality of life of patients measured by the EuroQol 5-Dimensional tool (EQ-5D) before and after hip or knee replacement surgery.

In all countries, substantial improvements in PROMs scores were observed after operations. For example, average quality of life after hip surgery improved in all countries, reaching a score equivalent to 80% or higher, up from scores equivalent to 35-50% pre-surgery (based on the OHS). Average changes from pre-operative to post-operative scores varied across countries in all scales. The highest change in OHS and OKS scores was observed in Ireland, where the improvement in quality of life measured by EQ-5D was also highest. For HOOS-PS and KOOS-PS, the Netherlands had the highest change from before to after surgery.

It should be noted that variations in post-operative scores reflect not only cross-country differences in the quality of hip and knee replacement surgery but also other factors such as differences in socio-demographic and clinical characteristics of patients reporting PROMs, so caution is needed when interpreting variations across countries.

Definition and comparability

PROMs results are based on data from national or subnational arthroplasty registries in countries using data on adult patients undergoing elective hip or knee replacement surgery with a principal diagnosis of osteoarthritis, who completed an OHS/OKS and/or HOOS/KOOS-PS questionnaire, and/or an EQ-5D or Short Form 12 (SF-12), version 1 or version 2, both before and after operations. The OHS/OKS and the HOOS/KOOS-PS are among the most common disease-specific PROMs used for hip and knee replacement surgery. Generic instruments including the EQ-5D and SF-12 are also frequently used to assess general quality of life of patients. Post-operative scores are adjusted for pre-operative score, as well as the age and sex of the patient cohort. A higher score denotes better outcomes on all these scales. Post-operative scores for Australia, Ireland and England (United Kingdom) are measured 6 months after the surgery, while others refer to 12 months after surgery, potentially leading to differences in the extent of recall bias. Scores derived from different instruments for the same operation are not comparable.

For OHS and OKS, data for Canada refer to Manitoba and Ontario, while data for Italy refer to Tuscany. For HOOS-PS and KOOS-PS, data for Italy refer to Galeazzi and Rizzoli. Sample sizes for France, Italy and Switzerland for the OKS are below 500 patients.

A mix of tools was also used to measure quality of life. In Canada, EQ-5D was used in Ontario and Alberta but SF-12 was used in Manitoba. In Italy, EQ-5D data are available from Tuscany and Rizzoli but SF-12 was used in Galeazzi. In Switzerland, SF-12 was used in Geneva. Data collected through SF-12 from these regions were converted to EQ-5D, and converted SF-12 scores might result in lower scores. The sample size for Switzerland is below 500 patients (Kendir et al., 2022_[2]).

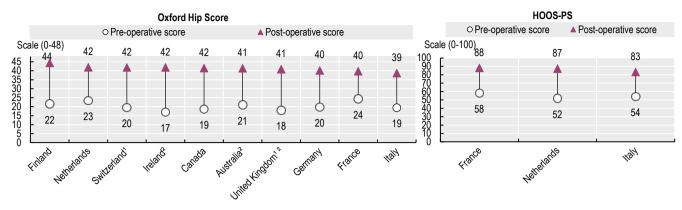
In all measures, data for Switzerland refer to Geneva, while data for the United Kingdom refer to England.

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.

OECD (forthcoming), *Findings of the OECD Working* [1] Group on Patient-Reported Indicators for Hip and Knee Replacement Surgery: Technical report on data collected from 2018-2021, OECD, Paris.

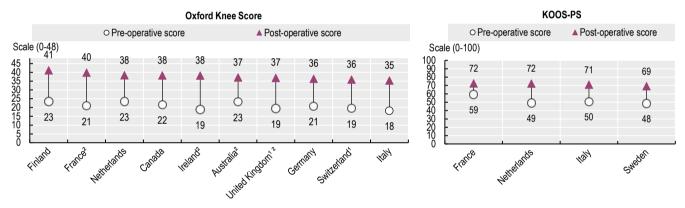
Figure 6.27. Patient-reported outcomes before and after hip replacement surgery, disease-specific measure, 2023 (or nearest year)



1. Data limited to specific localities (as detailed in "Definition and comparability" box). 2. Post-operative scores are measured 6 months after the surgery. Source: OECD PaRIS Hip and Knee PROMs Pilot Data Collection.

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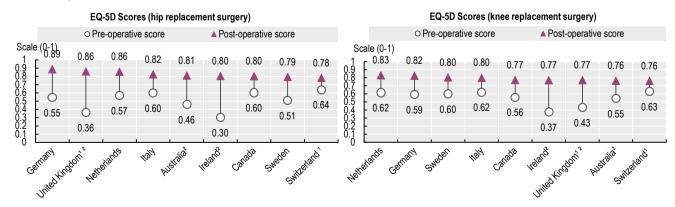
Figure 6.28 Patient-reported outcomes before and after knee replacement surgery, disease-specific measure, 2023 (or nearest year)



1. Data limited to specific localities (as detailed in "Definition and comparability" box). 2. Post-operative scores are measured 6 months after the surgery. Source: OECD PaRIS Hip and Knee PROMs Pilot Data Collection.

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Figure 6.29. Patient-reported quality of life before and after hip and knee replacement surgery, generic measure, 2023 (or nearest year)



1. Data limited to specific localities (as detailed in "Definition and comparability" box). 2. Post-operative scores are measured 6 months after the surgery. Source: OECD PaRIS Hip and Knee PROMs Pilot Data Collection.

StatLink ms https://stat.link/4r61o3



From: Health at a Glance 2023 OECD Indicators

Access the complete publication at: https://doi.org/10.1787/7a7afb35-en

Please cite this chapter as:

OECD (2023), "Patient-reported outcomes in acute care", in *Health at a Glance 2023: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/03d264a2-en

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