

**EQ-5D data for 15, 519 patients in 5 different Swedish orthopaedic quality registers before and 1 year after surgery – an observational study**

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**Abstract**

**Background and purpose:** The EQ-5D is a patient reported outcome measure (PROM) included in many national orthopaedic registers to support quality improvement and best clinical practices. To make priorities and allocate resources between patients and surgical procedures it is required to evaluate outcome differences, but studies comparing PROMs are sparse. We compared EQ-5D data and the follow-up rate for selected diagnoses reported to Swedish national orthopaedic quality registers before and 1 year after surgery.

**Material and methods:** Patients from 5 orthopaedic registers (Swespine, Swedish hip arthroplasty register, Swedish knee arthroplasty register, Swedankle and Swefoot) who, in 2014- 2018, underwent surgery in southern Sweden were included in the study. Data on the EQ-5D index, individual questions and the EQ VAS at baseline and at the 1-year follow-up were compared.

**Results:** 15,519 patients had completed the EQ-5D pre- and 1-year postoperatively. The follow-up rate ranged from 32-98%. All registers showed a statistical and clinically relevant improvement in the EQ-5D index ( $\Delta$  mean 0.29 -0.40), where patients who underwent hip arthroplasties experienced the largest improvement. The EQ-5D index improvements in patients with foot and ankle surgeries were larger than for patients with knee arthroplasties and spinal surgeries. The dimension self-care and usual activities had the largest change in patients reporting 'some problems'.

**Interpretation:** All 5 registers showed a clinically relevant improvement 1-year postoperatively regarding EQ-5D index, supporting continuous resource allocation to these groups of patients and surgical procedures. However, using PROM data to present register differences was challenged by the high dropout rate.