

Summary of research proposal LROI



Title:

Measurement instruments for primary hip and knee arthroplasty: A study using the national orthopaedic implant registries of the United Kingdom and the Netherlands

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Abstract:

The proposed study will be a validation study of PROMs (OKS, OHS) using novel validation methods, ie Item Response Theory (IRT), as opposed to classical test theory. The Oxford Knee/Hip Scores have been developed in the UK, and validated to some extent in the Netherlands, but novel analytical techniques may provide deeper insights into the performance of specific PROM items across different populations, and offer refined scoring systems that may be more valuable for clinical practice. This may help the OKS and OHS to gain traction in clinical settings. In the present study, we aim to validate refined Oxford Knee/Hip Scores using IRT based on >500,000 patients in the UK, and in the Dutch population, based on available pre- and post-operative lower extremity arthroplasty data of PROMs (2014-2020). In addition to identifying potential explanations for inter country differences in PROM reporting, we aim to understand the role of pre-operative characteristics on the performance of PROM (items).

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