Summary of research proposal LROI

Title:

Economic evaluation of the Dutch Arthroplasty Register: what are the costs and what are the potential benefits?



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Abstract:

Effective use of national arthroplasty registers has the potential to improve health outcomes and decrease healthcare costs by identifying factors associated with higher revision rates, which may reduce morbidity, mortality and costs associated with subsequent surgical procedures. Although there are costs associated with developing and maintaining these registers, there have been limited studies on economic evaluations of national arthroplasty registers, even though this may be crucial for healthcare decision-makers, policymakers and stakeholders. Therefore, this study aims to provide insight into the costs of maintaining the Dutch Arthroplasty Register (LROI) and to explore potential benefits associated with the LROI.

We will perform an exploratory economic evaluation, in which we will estimate the costs of maintaining the LROI based on the amount of reimbursement per registered hip or knee arthroplasty between 2007-2023, as well as the number of hip and knee revisions that need to be prevented for the benefits to outweigh the costs of the LROI. We will use scenario analyses to explore whether such a reduction in hip and knee revisions is theoretically feasible, in which we describe three scenarios. Potential benefits of the LROI will be calculated in terms of costs saved and quality-adjusted life years (QALYs) gained.

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