Summary of research proposal LROI

Title:

How many people in the Netherlands live with a joint replacement? A prevalence estimate using data from the Dutch Arthroplasty Register (LROI)

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Abstract:

In recent decades, there has been an increase in joint arthroplasties in the Netherlands. Due to the aging population and the increasing use of joint arthroplasties in younger patients, the annual procedure volumes could increase even further in the coming years. However, the prevalence of people having a joint replacement in the Netherlands has not been estimated before.

Since 2007, the Dutch Arthroplasty Register (LROI) has been registering hip and knee arthroplasties in the Netherlands. Shoulder arthroplasties were added to the database in 2014. Registry data can be used to estimate the prevalence of people living with a joint replacement, making it possible to project future demand for joint arthroplasty and to estimate the risk and economic burden of complications associated with joint arthroplasty.

In this population-based registry study, we will estimate the prevalence of people living with at least one joint replacement in the Netherlands according to joint, year, age and gender, using data from the LROI. We will include all primary hip and knee arthroplasties registered in the LROI between 2007-2022 and all primary shoulder arthroplasties between 2014- 2022. Denominator data for the Dutch population according to year, age and gender will be obtained from Statistics Netherlands.

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