

Summary of research proposal LROI



Title:

Association between volume and outcome in Revision Total Knee Arthroplasty; Do high volume centres perform better?

Authors:

P van Rensch, P Heesterbeek, A Wymenga, G van Hellemond, W Schreurs

Abstract:

There is a rising incidence of revision Knee Arthroplasty (R-KA) surgery worldwide, a further increase in the coming decades is predicted. At the same time, a trend is seen towards super specialisation and centralisation for all fields of orthopaedic surgery, especially for technically demanding procedures. Revision of a partial (Unicompartmental- or Patellofemoral Arthroplasty) or Total Knee Arthroplasty (TKA) can be as relatively simple as exchanging a polyethylene liner or as challenging as managing large femoral and tibial bony defects to restore normal anatomy and kinematics. For septic loosening, ongoing centralisation is already advocated. Almost all of the 97 Dutch hospitals performing primary KAs also perform R-KAs. This study aims to determine if this, often challenging, revision operation renders lower re-revision rates in high volume vs low volume hospitals. Therefore, we will evaluate the association between re-revision rates and hospital knee revision volume. We also want to study the re-revision rate associated with the degree of difficulty of revision KA. Volume is determined by the number of R-TKAs on a yearly basis and hospitals are divided into four groups; ≤ 12 cases per year, 13-24 cases per year, 25-52 cases per year and ≥ 53 cases per year.

Approval date: September 2020