Is it feasible to pool data from national shoulder registers with comparable healthcare structures? A new collaboration within the Nordic Arthroplasty Register Association (NARA).

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Abstract

Introduction The Nordic Arthroplasty Register Association (NARA) was initiated in 2007 and several unique papers about hip and knee replacements have been published. Inspired by this success we aimed to examine the feasibility of pooling data from the Nordic national shoulder registries by defining a common minimal data set.

Method In March 2014, a group of shoulder surgeons met in Copenhagen, Denmark to discuss the feasibility of pooling data from the Nordic national shoulder registries. Differences in funding, organization, data handling, included variables and outcome measures were discussed. A common minimal data was defined as a set of variables containing only data that all three registries could deliver and where consensus according to definition of the variables could be made.

Results We agreed upon a common minimal dataset containing patient-related data (Age, Gender and Diagnosis), operative data (Date, Implant Design and Brand) and data in case of revision (Date, Reason for Revision and New Implant). 19,857 primary arthroplasties were reported from 2004-13. Mean age was 69 years and 69 % were women. The most common indications were osteoarthritis (34.5 %) and acute fracture (34.0 %). During the study period the number of replacements for osteoarthritis, increased whereas replacements for inflammatory arthritis remained stable. There were inconsistences in the use of arthroplasty brands.

Interpretation

Despite some challenges we were able to pool data from the Nordic national registries into a common dataset. In future studies we compare arthroplasty designs for different diagnosis with regard to revision rates and reasons for revision.