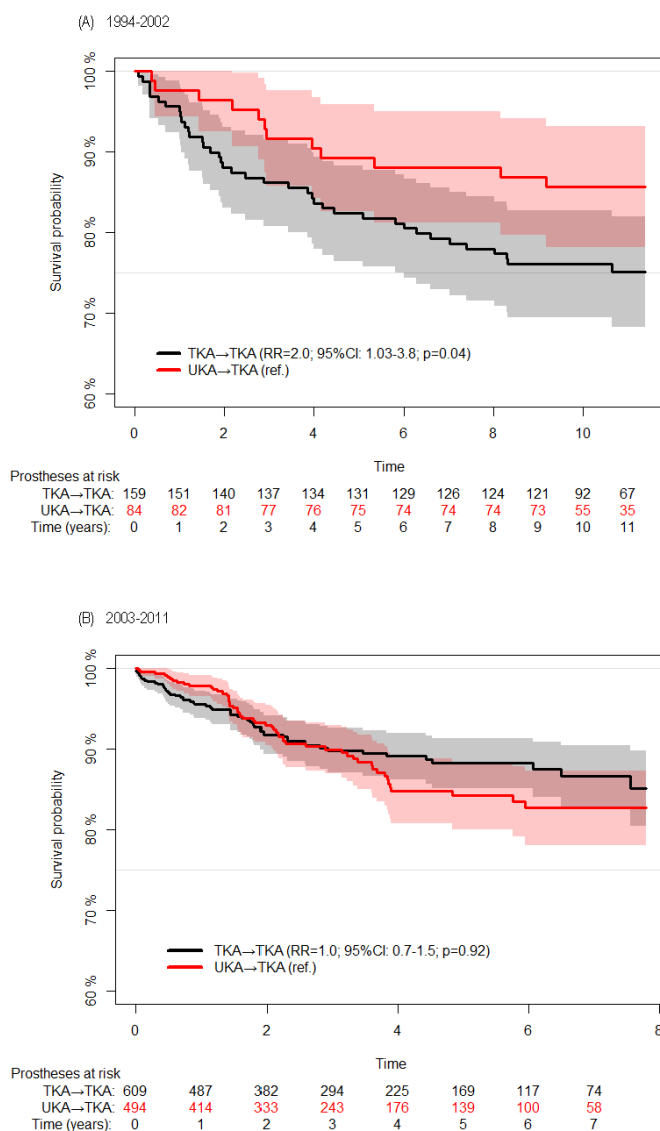


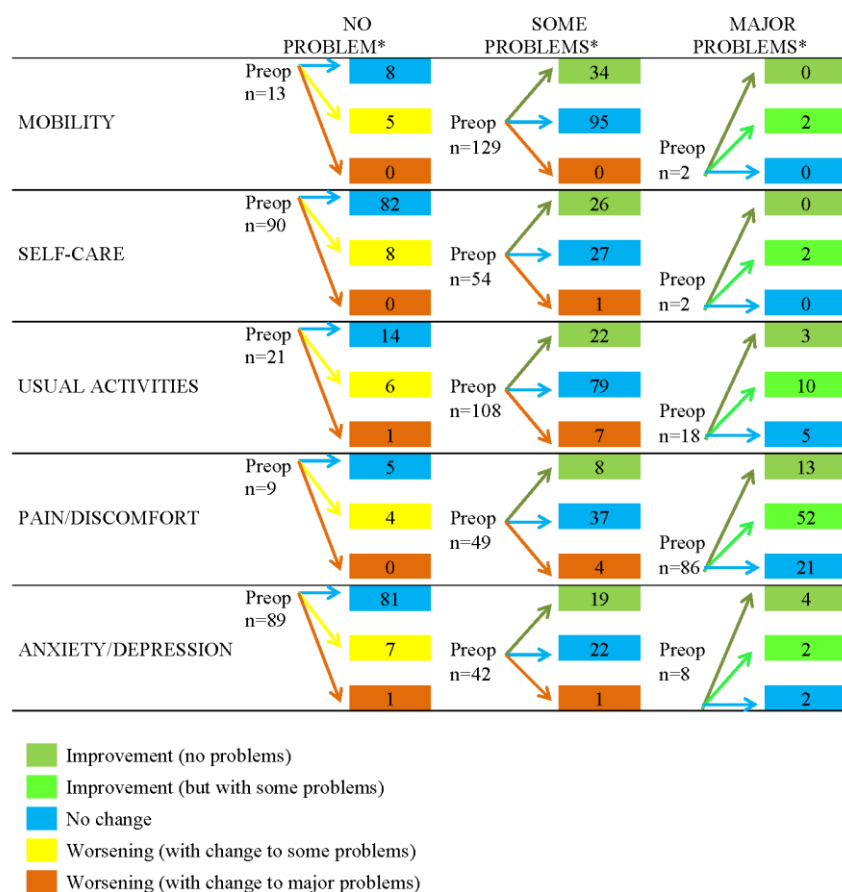
Appendix E-1 (Figures and Tables)

Fig. E-1



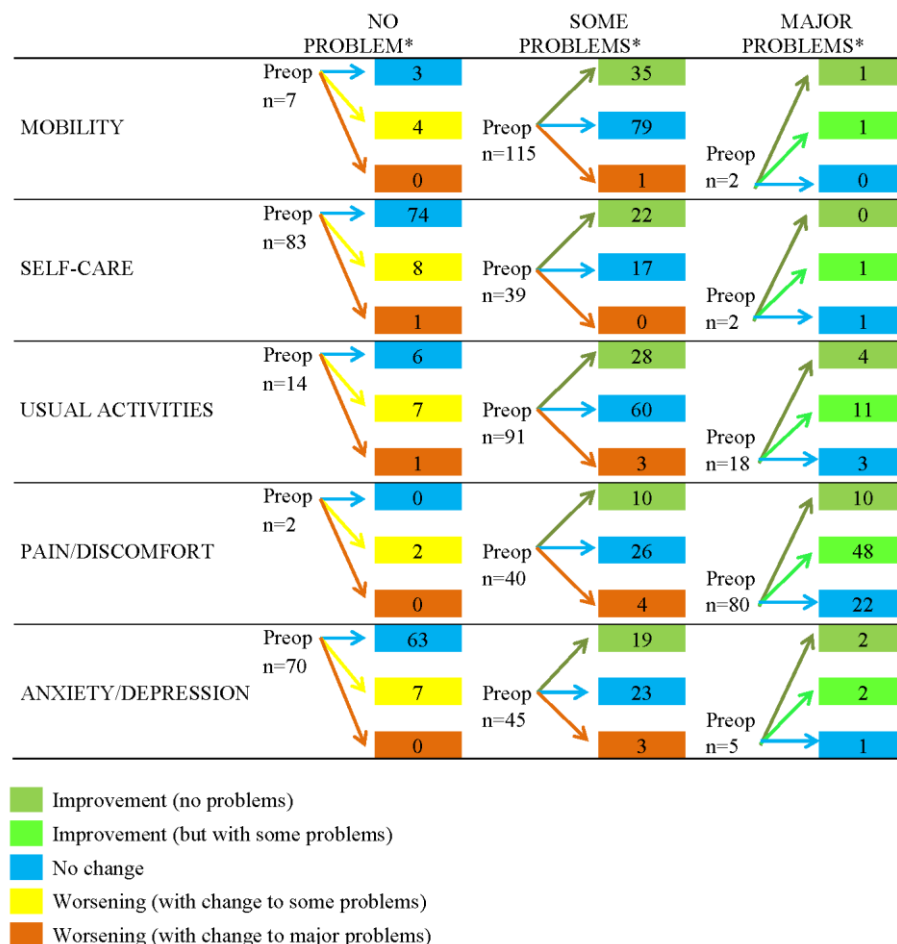
Survival curves (Kaplan-Meier) for revised knees (failed primary TKAs revised to TKAs [TKA→TKA] and failed primary UKAs revised to TKAs [UKA→TKA]) according to year of operation: 1994 to 2002 (**Fig. E-1A**) and 2003 to 2011 (**Fig. E-1B**), with any reason for re-revision as the end point. RR = relative risk of re-revision in the Cox regression analysis, where UKA→TKA was used as the reference group and adjusting for propensity-score covariates of sex, age at revision, duration of time since the revision operation, primary diagnosis, and type of fixation. CI = confidence interval, and time = duration of follow-up in years. The Kaplan-Meier survival curves were terminated when fewer than thirty knees remained at risk.

Fig. E-2



Changes in the severity level of problems according to each of the five domains of the EQ-5D among patients with a failed primary TKA revised to TKA at a minimum postoperative follow-up of one year (Norwegian Arthroplasty Register, 1994 to 2005). * = preoperative level of problems. Up to eleven of the patients had not reported either the preoperative or postoperative status for each EQ-5D domain. Therefore, only the remaining patients who reported both preoperative and postoperative status were used in the assessment of the changes in severity level for each domain.

Fig. E-3



Changes in severity level of problems according to each of the five domains of the EQ-5D among patients with a failed UKA revised to TKA at a minimum postoperative follow-up of one year (Norwegian Arthroplasty Register, 1994 to 2005) * = preoperative level of problems. Up to seven of the patients had not reported either the preoperative or postoperative status for each EQ-5D domain. Therefore, only the remaining patients who reported both preoperative and postoperative status were used in the assessment of the changes in severity level for each domain.

Table E-1 Types of Prosthesis Brands Used

Prosthesis (Manufacturer)	1994-2011*		1994-2005†	
	TKA→TKA, N = 768	UKA→TKA, N = 578	TKA→TKA, N = 150	UKA→TKA, N = 127
Genesis I (Smith & Nephew)	73	24	29	13
AGC-Anatomic (Biomet)	15	12	7	1
AGC-Universal (Biomet)	10	20	5	9
LCS (DePuy Synthes)	103	41	51	26
Duracon (Stryker)	33	33	2	4
NexGen (Zimmer)	69	56	5	2
Profix (Smith & Nephew)	163	201	37	57
LCS Complete (DePuy Synthes)	178	141	0	9
e.motion (B. Braun)	4	12	0	1
Triathlon (Stryker)	13	5	0	0
Vanguard (Biomet)	28	13	0	0
Maxim (Biomet)	10	0	2	0
Scorpio (Stryker)	30	6	0	0
Others	39	14	12	5

*Refers to the whole study population (Fig. 1). †Refers to the study population with patient-reported outcome measure (PROM) data in addition to the Norwegian Arthroplasty Register (NAR) data (Fig. 1). TKA→TKA = failed primary total knee arthroplasty (TKA) revised to TKA, and UKA→TKA = failed primary unicompartmental knee arthroplasty (UKA) revised to TKA.

TABLE E-2 Reasons for Re-Revision of TKA→TKA Versus UKA→TKA by Age at Revision (Norwegian Arthroplasty Register, 1994 to 2011)

Indication (Reason)	<60 Yr*			60-70 Yr*			>70 Yr*		
	TKA→TKA, N = 163	UKA→TKA, N = 193	P Value†	TKA→TKA, N = 222	UKA→TKA, N = 188	P Value†	TKA→TKA, N = 383	UKA→TKA, N = 197	P Value†
Loose femoral component	2	1	0.47	3	2	0.79	4	1	0.51
Loose tibial component	4	9	0.27	8	8	0.73	4	2	0.97
Loose patellar component	0	0	—	1	0	0.36	0	0	—
Dislocation of patella	1	0	0.28	1	0	0.36	2	0	0.31
Dislocation other than patella	0	0	—	0	0	—	1	0	0.47
Instability	8	12	0.59	3	1	0.40	7	0	0.06
Malalignment	2	6	0.23	1	2	0.47	3	1	0.70
Deep infection	11	4	0.03	5	2	0.36	14	5	0.47
Periprosthetic fracture	0	0	—	1	0	0.36	3	0	0.21
Defect or wear of polyethylene inserts	3	0	0.06	1	1	0.91	0	0	—
Pain alone	3	12	0.04	5	1	0.15	3	2	0.78
Progression of arthritis	0	0	—	0	0	—	1	0	0.47
Arthrofibrosis and stiff knee	4	0	0.03	0	1	0.36	1	0	0.47
Other reason	0	2	0.19	1	1	0.91	0	0	—

*More than one reason for revision and/or re-revision was reported for some patients. TKA→TKA = failed primary total knee arthroplasty (TKA) revised to TKA, and UKA→TKA = failed primary unicompartmental knee arthroplasty (UKA) revised to TKA. †P value for chi-square test.