TABLE E-1 Patient Characteristics at Baseline: Data for 87 Patients in Two Randomization Groups

Group	Accelerated Intervention	Standard Intervention	P Value*
Total hip arthroplasty, no.	28	28	
Female/male, no.	15/13	11/17	0.422
Age, mean (std. dev.)	62.3 (11.26)	65.2 (9.51)	0.292
Hip arthrosis/other, no.	27/1	28/0	0.391
Implant cemented/uncemented, no.	8/20	12/16	0.403
Employed	14	14	1.000
Preoperative medical care†, mean (US$)	62	108	0.409
Preoperative medication†, mean (US$)	113	189	0.890
Preoperative physiotherapy†, mean (US$)	72	146	0.147
Preoperative health-related quality of life, mean (std. dev.)	0.45 (0.30)	0.49 (0.22)	0.463
Total/unicompartmental knee arthroplasty, no.	15/2	12/2	
Female/male, no.	10/7	8/6	1.000
Age, mean (std. dev.)	67.2 (9.60)	66.2 (9.88)	0.786
Knee arthrosis/other, no.	17/0	13/1	0.469
Implant cemented/uncemented, no.	5/12	8/6	0.157
Employed, no.	4	5	0.693
Preoperative medical care†, mean (US$)	85	64	0.300
Preoperative medication†, mean (US$)	259	357	0.193
Preoperative physiotherapy†‡, mean (US$)	0	223	0.108
Preoperative health-related quality of life, mean (std. dev.)	0.47 (0.24)	0.60 (0.21)	0.053
Total, no.	45	42	
Female/male, no.	25/20	19/23	0.394
Age, mean (std. dev.)	64.1 (10.83)	65.5 (9.22)	0.514
Knee arthrosis/other, no.	44/1	41/1	1.000
Implant cemented/uncemented, no.	13/32	20/22	0.082
Employed, no.	18	19	0.668
Preoperative medical care†, mean (US$)	147	172	0.884
Preoperative medication†, mean (US$)	372	547	0.436
Preoperative physiotherapy†, mean (US$)	72	369	0.124
Preoperative health-related quality of life, mean (std. dev.)	0.46 (0.28)	0.53 (0.22)	0.123

*Categorical data were tested with the Fisher exact test. The age variable was normally distributed and was tested with the two-sample t test. All other variables were non-normally distributed and were tested with the Mann-Whitney rank-sum test. †In the twelve weeks before the operation. ‡P value calculated by comparing the numbers of patients referred to preoperative physiotherapy between the intervention groups.

TABLE E-2 Mean Costs Derived from Activity-Based Costing Analysis in the Accelerated and Standard Intervention Groups from Pre-Hospitalization to One Year Postoperatively for Eighty-seven Patients Treated with Total Hip Arthroplasty or with Total or Unicompartmental Knee Arthroplasty

Activity	Cost per Unit in DKK*	Mean Cost for Group in DKK*			
		Total Hip Arthroplasty		Total or Unicompartmental Knee Arthroplasty	
		Accelerated Intervention (N = 28)	Standard Intervention (N = 28)	Accelerated Intervention (N = 17)	Standard Intervention (N = 14)
Pre-hospitalization costs					
1. Information day, total		2783		2731	
Consultation, surgeon	590/h	148		148	
Consultation, anesthetist	590/h	221		221	
Consultation, physician	295/h	148		148	
Nurses	236/h	915		915	
Secretary	195/h	49		49	
Porter	194/h	24		24	
Physiotherapist	206/h	51		51	
Occupational therapist	210/h	52			
Blood tests	407/procedure	407		407	
Electrocardiogram	102/procedure	102		102	
Patient transportation	1.8/km	91		91	
Informal care	64/h	575		575	
Hospitalization costs					
2. Boarding of patient at hospital	2788/day	12148	20213	16072	24495
3. Care, total		2205	4088	3670	5658
Nursing care	236/h	1878	3111	3217	4553
Blood tests	407/procedure		407		407
Electrocardiogram	102/procedure		102		102
Food for accelerated-intervention group	74/portion	327		453	
Food for standard-intervention group	64/portion		468		596
4. Rehabilitation, total		880	1440	656	1175
Physiotherapy	206/h	469	738	656	1175
Occupational therapy	210/h	411	701		
Post-hospitalization costs					
5. Patients					
Patient costs, total		2672	3613	2716	3035
Medication, non-prescript.	Cost price	44	118	0	69
Paid private help	253/h	253	118	552	344
Informal care	64/h	1512	2304	1666	2127
Home changes	Cost price	275	215	3	71
Training center	25/visit	0	47	33	42
Complementary alternative medicine	226/visit	271	361	311	148
Transportation	Cost price	317	450	152	235
Productivity loss		44337	53001	38225	48205
Paid	8099/week	77519	87354	97188	93948
Unpaid	2331/week	11156	18648	20082	22792
6. Primary care, total		6377	5302	4467	4817
General practitioner	89/visit	371	286	363	245
Medication	Cost price	1808	1674	2146	1633
Nurse home care	440/visit	1085	1031	889	1143

Physiotherapist	230/visit	1634	1641	503	1795
Paid public help	253/visit	1480	670	567	0
7. Hospital readmission, total		366	0	2108	7983
Swelling	Cost price			2108	
Dislocation	Cost price	366			
Reoperation	Cost price				7983
Total costs		71768	87657	70644	95367

*Five Danish kroner (DKK) approximately correspond to one U.S. dollar.

TABLE E-3 Incremental Effect (in Quality-Adjusted Life-Years [QALYs]), Derived with Univariate and Multivariate Analyses, Between Standard and Accelerated Intervention Groups Treated with Total Hip Arthroplasty or with Total or Unicompartmental Knee Arthroplasty

| | | | Stratified Analysis | | | |
| | Crude Analysis (All Patients; N = 87) | | Total Hip Arthroplasty (N = 56) | | Total or Unicompartmental Knee Arthroplasty (N = 31) | |
Analysis	Incremental Effect (95% Confidence Interval*)	P Value†	Incremental Effect (95% Confidence Interval*)	P Value†	Incremental Effect (95% Confidence Interval*)	P Value†
Univariate	0.051 (0.006 to 0.118)	0.029				
Multivariate‡			0.083 (0.020 to 0.145)	0.006	−0.011 (−0.094 to 0.042)	0.793

*The 95% confidence interval was derived from bias-corrected and accelerated bootstrap of 2000 replicates. †Tested with the nonparametric percentile method. ‡In the multivariate analysis, incremental effect was adjusted for health-related quality of life at baseline, sex, age, a diagnosis of osteoarthritis or not, a cemented implant or not, and whether a hip or knee arthroplasty was performed and was analyzed with use of ordinary least-square regression.

TABLE E-4 Incremental Costs, Derived with Multivariate Analyses# with Use of Different Analysis Models and Cost Estimates, Between Standard and Accelerated-Intervention Groups Treated with Total Hip Arthroplasty or with Total or Unicompartmental Knee Arthroplasty

| | | | Stratified | | | |
| | Crude Analysis (All Patients; N = 87) | | Total Hip Arthroplasty (N = 56) | | Total or Unicompartmental Knee Arthroplasty (N = 31) | |
Analysis	Incremental Cost (95% Confidence Interval*) (DKK§)	P Value†	Incremental Cost (95% Confidence Interval*) (DKK§)	P Value†	Incremental Cost (95% Confidence Interval*) (DKK§)	P Value†
Model‡						
GLM Gaussian¶	−18,496 (−4555 to −33,515)	0.008	−12,005 (−1173 to −25,018)	0.021		
GLM Poisson††	−16,515 (−5047 to −29,056)	0.007			−30,059 (5349 to −73,749)	0.112
GLM Gamma‡‡					−29,056 (4725 to −63,023)	0.083
Estimate						
Cost B§§	−15,430 (−5520 to −25,346)	0.003	−15,493 (−1318 to −29,667)	0.028	−14,944 (−290 to −29,604)	0.045
Cost C‖‖	−11,714 (−1129 to −22,299)	0.009	−7,658 (303 to −15,285)	0.079	−26,602 (−1779 to −75,446)	0.053
Cost D¶¶	−9,059 (−2687 to −15,215)	0.007	−8,226 (−202 to −16,250)	0.056	−14,288 (−2902 to −25,681)	0.012

#Ordinary least-square regression. In the multivariate analysis, incremental cost was adjusted for any preoperative primary-care cost, health-related quality of life at baseline, sex, age, a diagnosis of osteoarthritis or not, a cemented implant or not, whether the patient was employed or not, and whether a hip or knee arthroplasty was performed. *The 95% confidence intervals were derived from a bootstrap of 2000 replicates. §Five Danish kroner (DKK) approximately correspond to one U.S. dollar. †Tested with the nonparametric percentile method. ‡Cost-estimate A (total average costs) was used in the analyses. Estimates derived with generalized linear models (GLM) are shown only for results that passed statistical tests (the skewness/kurtosis test, heteroskedasticity test (Breusch-Pagan test), modified Park test (GLM family test), Pregibon link test, modified Hosmer-Lemeshow test, and Pearson correlation test). ††Generalized linear models (GLM) with a log link function and a Poisson family. ¶Generalized linear models (GLM) with a log link function and a Gaussian family. ‡‡Generalized linear models (GLM) with a log link function and a Gamma family. §§Cost estimate B: analysis performed with total average cost excluding average hospital-readmission cost (analyzed with use of ordinary least-square regression). ‖‖Cost estimate C: analysis performed with total average cost excluding average productivity loss (analyzed with use of ordinary least-square regression). ¶¶Cost estimate D: analysis performed with total average cost excluding average productivity loss and average hospital-readmission cost (analyzed with use of ordinary least-square regression).