

TABLE E-1 Multivariate Analysis of Predictors of Readmission within Thirty and Ninety Days*

Variable	Thirty Days		Ninety Days	
	OR (95% CI)	P Value	OR (95% CI)	P Value
Knee joint	Excluded	NA	2.16 (1.77-2.62)	<0.001
Unilateral	Excluded	NA	1.69 (1.25-2.28)	0.001
Male sex	1.46 (1.16-1.84)	0.002	1.41 (1.17-1.69)	<0.001
Charlson Index	Excluded	NA	Excluded	NA
Age (per yr)	Excluded	NA	0.99 (0.98-1.0)	0.003
Duration of stay† (per day)	11.15 (6.15-20.22)	<0.001	10.88 (6.50-18.20)	<0.001
Ethnicity				
Black	1.0	NA	1.0	NA
Hispanic	1.11 (0.33-3.69)	0.87	0.83 (0.29-2.35)	0.72
Other	0.52 (0.12-2.35)	0.40	0.81 (0.28-2.38)	0.70
Unknown	0.27 (0.14-0.54)	<0.001	0.28 (0.16-0.48)	<0.001
White	0.67 (0.49-0.91)	0.01	0.71 (0.56-0.92)	0.009
BMI	Excluded	NA	Excluded	NA
Discharge				
Home	1.0	NA	1.0	NA
Inpatient	1.46 (1.13-1.89)	0.004	1.47 (1.17-1.83)	0.001
Skilled nursing facility	1.27 (0.89-1.79)	0.19	1.19 (0.89-1.57)	0.24
Distance to hospital† (per km)	0.59 (0.47-0.75)	<0.001	0.70 (0.58-0.85)	<0.001

*A reverse stepwise logistic regression was utilized. All variables included in the analysis are indicated below, including those excluded during the analysis. OR = odds ratio, CI = confidence interval, and NA = not applicable. †Because of skewness of data for this variable, a logarithmic transformation was performed before the multivariate analysis.

TABLE E-2 Comparison of Potential Predictors of Ninety-Day Readmission in Admissions That Did and Did Not Require Readmission, Stratified by Cause

	Infection		P Value
	Yes, N = 142	No, N = 10,491	
Knee joint†	89 (62.7)	5118 (48.8)	0.001
Simultaneous bilateral†	18 (12.7)	1264 (12.0)	0.82
Male sex†	72 (50.7)	4476 (42.7)	0.05
Charlson Index†			0.01
0	86 (60.6)	7350 (70.1)	
1	36 (25.4)	2437 (23.2)	
2	18 (12.7)	550 (5.2)	
≥3	2 (1.4)	154 (1.5)	
Age‡ (yr)	64.4 (62.5-66.4)	63.8 (63.6-64.1)	0.61
Duration of stay‡ (d)	5.2 (4.1-6.3)	3.9 (3.8-3.9)	<0.001§
Ethnicity†			0.15
White	118 (83.1)	8302 (79.1)	
Black	18 (12.7)	1133 (10.8)	
Hispanic	1 (0.7)	61 (0.6)	
Other	1 (0.7)	60 (0.6)	
Unknown	4 (2.8)	935 (8.9)	
BMI‡ (kg/m ²)	32.8 (31.5-34.1)	30.2 (30.1-30.3)	<0.001
Discharge†			0.27
Home	67 (47.2)	5403 (51.5)	
Inpatient	49 (34.5)	3646 (34.8)	
Skilled nursing facility	26 (18.3)	1442 (13.7)	
Distance‡ (km)	32.2 (24.5-39.8)	53.6 (49.9-57.3)	0.03§

*Includes only cases following total knee arthroplasty. †The values are given as the number of readmissions, with the percentage of the number of admissions (N) in parentheses. ‡The values are given as the mean, with the 95% confidence interval in parentheses. §Calculated after logarithmic transformation.

TABLE II (continued)

Stiffness*			All Others		
Yes, N = 141	No, N = 5066	P Value	Yes, N = 289	No, N = 10,344	P Value
141 (100)	5066 (100)	N/A	151 (52.2)	5056 (48.9)	0.26
12 (8.5)	947 (18.7)	0.002	38 (13.1)	1244 (12.0)	0.56
61 (43.3)	1807 (35.7)	0.06	130 (45.0)	4418 (42.7)	0.44
		0.024			<0.001
115 (81.6)	3359 (66.3)		163 (56.4)	7273 (70.3)	
21 (14.9)	1319 (26.0)		96 (33.2)	2377 (23.0)	
4 (2.8)	311 (6.1)		23 (8.0)	545 (5.3)	
1 (0.7)	77 (1.5)		7 (2.4)	149 (1.4)	
58.8 (57.3-60.2)	65.8 (65.5-66)	<0.001	66.4 (64.8-67.9)	63.8 (63.6-64.0)	<0.001
3.9 (3.7-4.1)	4.0 (4.0-4.1)	0.48§	5.1 (4.7-5.4)	3.9 (3.8-3.9)	<0.001§
		0.06			<0.001
104 (73.8)	3934 (77.7)		221 (76.5)	8199 (79.3)	
29 (20.6)	652 (12.9)		57 (19.7)	1094 (10.6)	
1 (0.7)	34 (0.7)		2 (0.7)	60 (0.6)	
1 (0.7)	30 (0.6)		2 (0.7)	59 (0.6)	
6 (4.3)	416 (8.2)		7 (2.4)	932 (9.0)	
29.8 (28.9-30.8)	31.8 (31.6-32.0)	<0.001	30.9 (30-31.7)	30.2 (30.1-30.3)	0.06
		<0.001			<0.001
85 (60.3)	2013 (39.7)		93 (32.2)	5377 (52.0)	
40 (28.4)	2203 (43.5)		142 (49.1)	3553 (34.3)	
16 (11.3)	850 (16.8)		54 (18.7)	1414 (13.7)	
41.2 (29.1-53.4)	48.6 (43.7-53.5)	0.21§	41.1 (24.3-57.9)	53.6 (49.9-57.4)	<0.001§