

## Appendix

TABLE E-1 Associations Between All-Cause 90-Day Post-Discharge Readmission and Baseline, Operative, and Patient Characteristics and Comorbidities

Characteristic or Comorbidity*	90-Day Readmission (N = 53)†	No 90-Day Readmission (N = 971)†	P Value‡
Age (yr)	64.1 ± 9.3	62.9 ± 10.6	0.41
Female sex	28 (52.8%)	468 (48.2%)	0.51
White race	51 (96.2%)	913 (94.0%)	0.48
BMI (n = 1,003) (kg/m <sup>2</sup> )	28.8 ± 5.4	29.8 ± 5.7	0.163
ASA score (n = 1,000)	2.5 ± 0.5	2.4 ± 0.5	0.35
Current smoking (n = 851)	1 of 46 (2.2%)	34 of 805 (4.2%)	0.50
Prior surgery	29 (54.7%)	549 (56.5%)	0.79
Right ankle	28 (52.8%)	535 (55.1%)	0.98
Bilaterality	2 (3.8%)	11 (1.1%)	0.17
Infinity	8 (15.1%)	121 (12.5%)	0.58
Inbone	18 (34.0%)	376 (38.7%)	0.48
Salto Talaris	14 (26.4%)	247 (25.4%)	0.87
STAR	14 (26.4%)	240 (24.7%)	0.78
No. of additional procedures at implantation	1.4 ± 1.5	1.4 ± 1.4	0.99
Length of stay (n = 1,023) (days)	1.6 ± 0.8	1.4 ± 0.8	0.22
Incomplete in-office follow-up	2 (3.8%)	36 (3.7%)	0.98
Charlson-Deyo comorbidity index	3.4 ± 2.1	3.1 ± 1.9	0.28
Hypertension, uncomplicated	28 (52.8%)	573 (59.0%)	0.38
Obesity	13 (24.5%)	265 (27.3%)	0.66
Solid tumor without metastasis	13 (24.5%)	232 (23.9%)	0.92
Depression	11 (20.8%)	215 (22.1%)	0.81
Rheumatoid arthritis or collagen vascular diseases	13 (24.5%)	192 (19.8%)	0.41
Cardiac arrhythmias	10 (18.9%)	141 (14.5%)	0.4
Hypothyroidism	7 (13.2%)	130 (13.4%)	0.97
Diabetes without chronic complication	4 (7.5%)	126 (13.0%)	0.22
Chronic pulmonary disease	7 (13.2%)	117 (12.0%)	0.8
Deficiency anemia	7 (13.2%)	95 (9.8%)	0.44
Valvular disease	3 (5.7%)	98 (10.1%)	0.26
Coagulopathy	4 (7.5%)	67 (6.9%)	0.86
Peptic ulcer disease	3 (5.7%)	49 (5.0%)	0.85
Cerebrovascular disease	3 (5.7%)	49 (5.0%)	0.85
Other neurological disorders	3 (5.7%)	43 (4.4%)	0.68
Peripheral vascular disorders	3 (5.7%)	42 (4.3%)	0.66
Myocardial infarction	1 (1.9%)	37 (3.8%)	0.43
Renal disease	4 (7.5%)	31 (3.2%)	0.137
Fluid and electrolyte disorders	1 (1.9%)	33 (3.4%)	0.52
Mild liver disease	2 (3.8%)	26 (2.7%)	0.65
Congestive heart failure	2 (3.8%)	25 (2.6%)	0.62
AIDS or HIV	0 (0%)	2 (0.2%)	0.64
Alcohol abuse	0 (0%)	21 (2.2%)	0.133
Psychoses	1 (1.9%)	17 (1.8%)	0.94
Diabetes, complicated	0 (0%)	11 (1.1%)	0.28
Pulmonary circulation disorders	0 (0%)	8 (0.8%)	0.36
Lymphoma	0 (0%)	6 (0.6%)	0.42
Hypertension, complicated	0 (0%)	7 (0.7%)	0.39
Weight loss	0 (0%)	7 (0.7%)	0.39
Blood-loss anemia	0 (0%)	6 (0.6%)	0.42
Drug abuse	1 (1.9%)	2 (0.2%)	0.127

Dementia	0 (0%)	3 (0.3%)	0.57
Hemiplegia or paraplegia	0 (0%)	2 (0.2%)	0.64
Paralysis	0 (0%)	2 (0.2%)	0.64
Metastatic cancer	1 (1.9%)	1 (0.1%)	0.071
Moderate or severe liver disease	0 (0%)	1 (0.1%)	0.74

\*Unless otherwise noted, n = 1,024 patients. BMI = body mass index, ASA = American Society of Anesthesiologists, STAR = Scandinavian Total Ankle Replacement, AIDS = acquired immunodeficiency syndrome, and HIV = human immunodeficiency virus. †Values are given as the mean and standard deviation or as the number of patients with the percentage in parentheses. ‡A p value of <0.05 indicates significance.

TABLE E-2 Associations Between 90-Day Non-Excluded Comprehensive Care for Joint Replacement (CJR) Readmissions and Baseline, Operative, and Patient Characteristics and Comorbidities

Characteristic or Comorbidity*	90-Day CJR Readmission (N = 45)†	No 90-Day CJR Readmission (N = 979)†	P Value‡
Age (yr)	64.6 ± 9.7	62.9 ± 10.6	0.29
Female sex	24 (53.3%)	472 (48.2%)	0.5
White race	43 (95.6%)	921 (94.1%)	0.68
BMI (n = 1,003) (kg/m <sup>2</sup> )	28.9 ± 5.5	29.8 ± 5.7	0.25
ASA score (n = 1,000)	2.5 ± 0.5	2.4 ± 0.5	0.28
Current smoking (n = 851)	1 of 38 (2.6%)	34 of 813 (4.2%)	0.62
Prior surgery	25 (55.6%)	553 (56.5%)	0.90
Right ankle	28 of 51 (54.9%)	535 of 972 (55.0%)	0.87
Infinity	6 (13.3%)	123 (12.6%)	0.88
Inbone	16 (35.6%)	378 (38.6%)	0.68
Salto Talaris	13 (28.9%)	248 (25.3%)	0.59
STAR	11 (24.4%)	243 (24.8%)	0.95
Any additional procedure at implantation	28 (62.2%)	682 (69.7%)	0.29
No. of additional procedures at implantation	1.5 ± 1.6	1.4 ± 1.3	0.80
Length of stay (n = 1,023) (days)	1.6 ± 0.8	1.4 ± 0.7	0.21
Incomplete in-office follow-up	2 (4.4%)	36 (3.7%)	0.80
Charlson-Deyo comorbidity index	3.3 ± 2.2	3.1 ± 1.9	0.37
Hypertension, uncomplicated	24 (53.3%)	577 (58.9%)	0.46
Obesity	11 (24.4%)	267 (27.3%)	0.68
Solid tumor without metastasis	11 (24.4%)	234 (23.9%)	0.93
Depression	9 (20.0%)	217 (22.2%)	0.73
Rheumatoid arthritis or collagen vascular diseases	10 (22.2%)	195 (19.9%)	0.71
Cardiac arrhythmias	8 (17.8%)	143 (14.6%)	0.56
Hypothyroidism	5 (11.1%)	132 (13.5%)	0.65
Diabetes without chronic complication	3 (6.7%)	127 (13.0%)	0.21
Chronic pulmonary disease	6 (13.3%)	118 (12.1%)	0.80
Deficiency anemia	7 (15.6%)	95 (9.7%)	0.20
Valvular disease	3 (6.7%)	98 (10.0%)	0.46
Coagulopathy	4 (8.9%)	67 (6.8%)	0.6
Peptic ulcer disease	2 (4.4%)	50 (5.1%)	0.84
Cerebrovascular disease	1 (2.2%)	51 (5.2%)	0.37
Other neurological disorders	2 (4.4%)	44 (4.5%)	0.99
Peripheral vascular disorders	3 (6.7%)	42 (4.3%)	0.45
Myocardial infarction	1 (2.2%)	37 (3.8%)	0.59
Renal disease	3 (6.7%)	32 (3.3%)	0.22
Fluid and electrolyte disorders	1 (2.2%)	33 (3.4%)	0.67
Mild liver disease	2 (4.4%)	26 (2.7%)	0.47
Congestive heart failure	2 (4.4%)	25 (2.6%)	0.44
AIDS or HIV	0 (0%)	2 (0.2%)	0.76
Alcohol abuse	0 (0%)	21 (2.1%)	0.32
Psychoses	1 (2.2%)	17 (1.7%)	0.81
Diabetes, complicated	0 (0%)	11 (1.1%)	0.48
Pulmonary circulation disorders	0 (0%)	8 (0.8%)	0.54
Lymphoma	0 (0%)	6 (0.6%)	0.6
Hypertension, complicated	0 (0%)	7 (0.7%)	0.57
Weight loss	0 (0%)	7 (0.7%)	0.57
Blood-loss anemia	0 (0%)	6 (0.6%)	0.60
Drug abuse	1 (2.2%)	2 (0.2%)	0.105
Dementia	0 (0%)	3 (0.3%)	0.71
Hemiplegia or paraplegia	0 (0%)	2 (0.2%)	0.76
Metastatic cancer	1 (2.2%)	1 (0.1%)	<b>0.002</b>

Paralysis	0 (0%)	2 (0.2%)	0.76
Moderate or severe liver disease	0 (0%)	1 (0.1%)	0.83

\*Unless otherwise noted, n = 1,024 patients. BMI = body mass index, ASA = American Society of Anesthesiologists, STAR = Scandinavian Total Ankle Replacement, AIDS = acquired immunodeficiency syndrome, and HIV = human immunodeficiency virus. †Values are given as the mean and standard deviation or as the number of patients with the percentage in parentheses. ‡A p value of <0.05, given in boldface type, indicates significance.

TABLE E-3 Associations Between Total Ankle Arthroplasty (TAA)-Related 90-Day Post-Discharge Readmission or Emergency Department (ED) Visitation and Baseline, Operative, and Patient Characteristics and Comorbidities

Characteristic or Comorbidity*	TAA-Related Readmission or ED (N = 64)†	No TAA-Related Readmission or ED (N = 960)†	P Value‡
Age (yr)	63.5 ± 10.2	63 ± 10.6	0.68
Female sex	30 (46.9%)	466 (48.5%)	0.8
White race	60 (93.8%)	904 (94.2%)	0.89
BMI (n = 1,003) (kg/m <sup>2</sup> )	29.9 ± 6.1	29.8 ± 5.6	0.84
ASA score (n = 1,000)	2.4 ± 0.6	2.4 ± 0.5	0.78
Current smoking (n = 851)	2 of 51 (3.8%)	33 of 798 (4.1%)	0.90
Prior surgery	38 (59.4%)	540 (56.3%)	0.62
Right ankle	28 (43.8%)	529 (55.1%)	0.06
Bilaterality	0 (0%)	13 (1.4%)	0.194
Infinity	9 (14.1%)	120 (12.5%)	0.72
Inbone	22 (34.4%)	372 (38.8%)	0.48
Salto Talaris	19 (29.7%)	242 (25.2%)	0.43
STAR	16 (25.0%)	238 (24.8%)	0.97
No. of additional procedures at implantation	1.6 ± 1.6	1.4 ± 1.3	0.22
Length of stay (n = 1,023) (days)	1.5 ± 0.8	1.4 ± 0.7	0.29
Incomplete in-office follow-up	3 (4.7%)	35 (3.6%)	0.68
Charlson-Deyo comorbidity index	3.4 ± 2.3	3.1 ± 1.9	0.23
Hypertension, uncomplicated	37 (57.8%)	564 (58.8%)	0.88
Obesity	21 (32.8%)	257 (26.8%)	0.3
Solid tumor without metastasis	15 (23.4%)	230 (24.0%)	0.92
Depression	17 (26.6%)	209 (21.8%)	0.38
Rheumatoid arthritis or collagen vascular diseases	14 (21.9%)	191 (19.9%)	0.7
Cardiac arrhythmias	11 (17.2%)	140 (14.6%)	0.58
Hypothyroidism	7 (10.9%)	130 (13.5%)	0.54
Diabetes without chronic complication	7 (10.9%)	123 (12.8%)	0.66
Chronic pulmonary disease	11 (17.2%)	113 (11.8%)	0.22
Deficiency anemia	7 (10.9%)	95 (9.9%)	0.79
Valvular disease	6 (9.4%)	95 (9.9%)	0.89
Coagulopathy	5 (7.8%)	66 (6.9%)	0.78
Peptic ulcer disease	4 (6.3%)	48 (5.0%)	0.67
Cerebrovascular disease	4 (6.3%)	48 (5.0%)	0.67
Other neurological disorders	3 (4.7%)	43 (4.5%)	0.94
Peripheral vascular disease	5 (7.8%)	35 (3.6%)	0.137
Myocardial infarction	1 (1.6%)	37 (3.9%)	0.29
Renal disease	5 (7.8%)	30 (3.1%)	0.082
Fluid and electrolyte disorders	2 (3.1%)	32 (3.3%)	0.93
Mild liver disease	3 (4.7%)	25 (2.6%)	0.36
Congestive heart failure	4 (6.3%)	23 (2.4%)	0.108
AIDS or HIV	0 (0%)	2 (0.2%)	0.61
Alcohol abuse	0 (0%)	21 (2.2%)	0.098
Psychoses	0 (0%)	18 (1.9%)	0.126
Diabetes, complicated	1 (1.6%)	10 (1.0%)	0.71
Pulmonary circulation disorders	1 (1.6%)	7 (0.7%)	0.51
Lymphoma	0 (0%)	6 (0.6%)	0.38
Hypertension, complicated	0 (0%)	7 (0.7%)	0.34
Weight loss	0 (0%)	7 (0.7%)	0.34
Blood-loss anemia	1 (1.6%)	5 (0.5%)	0.37
Drug abuse	2 (3.1%)	1 (0.1%)	<b>0.006</b>
Dementia	0 (0%)	3 (0.3%)	0.53
Hemiplegia or paraplegia	0 (0%)	2 (0.2%)	0.61

Paralysis	0 (0%)	2 (0.2%)	0.61
Metastatic cancer	1 (1.6%)	1 (0.1%)	0.088
Moderate or severe liver disease	0 (0%)	1 (0.1%)	0.72

\*Unless otherwise noted, n = 1,024 patients. BMI = body mass index, ASA = American Society of Anesthesiologists, STAR = Scandinavian Total Ankle Replacement, AIDS = acquired immunodeficiency syndrome, and HIV = human immunodeficiency virus. †Values are given as the mean and standard deviation or as the number of patients with the percentage in parentheses. ‡A p value of <0.05, given in boldface type, indicates significance.

TABLE E-4 Associations Between Wound Complication Necessitating Readmission, Emergency Department (ED) Visitation, or Wound-Healing Consultation and Baseline, Operative, and Patient Characteristics and Comorbidities\*

Characteristic or Comorbidity*	Wound Complication (N = 56)†	No Wound Complication (N = 968)†	P Value‡
Age (yr)	61.6 ± 12.1	63.1 ± 10.4	0.31
Female	27 (48.2%)	469 (48.5%)	0.97
White race	54 (96.4%)	910 (94.0%)	0.42
BMI (n = 1,003) (kg/m <sup>2</sup> )	29.3 ± 5.9	29.8 ± 5.6	0.49
ASA score (n = 1,000)	2.4 ± 0.6	2.4 ± 0.5	0.91
Current smoking (n = 851)	4 of 46 (8.7%)	31 of 805 (3.9%)	0.118
Prior surgery	34 (60.7%)	544 (56.2%)	0.51
Right ankle	29 (51.8%)	528 (55.3%)	0.61
Bilaterality	0 (0%)	13 (1.3%)	0.23
Infinity	8 (14.3%)	121 (12.5%)	0.7
Inbone	18 (32.1%)	376 (38.8%)	0.31
Salto Talaris	15 (26.8%)	246 (25.4%)	0.82
STAR	16 (28.6%)	238 (24.6%)	0.51
Any additional procedure at implantation	36 (64.3%)	674 (69.6%)	0.41
Length of stay (n = 1,023) (days)	1.6 ± 1	1.4 ± 0.7	0.104
Incomplete in-office follow-up	2 (3.6%)	36 (3.7%)	0.95
Charlson-Deyo comorbidity index	3.2 ± 2.2	3.1 ± 1.9	0.63
Hypertension, uncomplicated	32 (57.1%)	569 (58.8%)	0.81
Obesity	18 (32.1%)	260 (26.9%)	0.4
Solid tumor without metastasis	12 (21.4%)	233 (24.1%)	0.65
Depression	14 (25.0%)	212 (21.9%)	0.59
Rheumatoid arthritis or collagen vascular diseases	17 (30.4%)	188 (19.4%)	0.059
Cardiac arrhythmias	10 (17.9%)	141 (14.6%)	0.51
Hypothyroidism	6 (10.7%)	131 (13.5%)	0.54
Diabetes without chronic complication	4 (7.1%)	126 (13.0%)	0.168
Chronic pulmonary disease	7 (12.5%)	117 (12.1%)	0.93
Deficiency anemia	4 (7.1%)	98 (10.1%)	0.45
Valvular disease	8 (14.3%)	93 (9.6%)	0.28
Coagulopathy	3 (5.4%)	68 (7.0%)	0.62
Cerebrovascular disease	6 (10.7%)	46 (4.8%)	0.08
Peptic ulcer disease	0 (0%)	49 (5.1%)	<b>0.017</b>
Other neurological disorders	4 (7.1%)	42 (4.3%)	0.36
Peripheral vascular disease	5 (8.9%)	35 (3.6%)	0.083
Myocardial infarction	2 (3.6%)	36 (3.7%)	0.95
Renal disease	3 (5.4%)	32 (3.3%)	0.44
Fluid and electrolyte disorders	2 (3.6%)	32 (3.3%)	0.92
Mild liver disease	3 (5.4%)	25 (2.6%)	0.27
Congestive heart failure	6 (10.7%)	21 (2.2%)	<b>0.003</b>
AIDS or HIV	0 (0%)	2 (0.2%)	0.64
Alcohol abuse	0 (0%)	21 (2.2%)	0.122
Psychoses	0 (0%)	18 (1.9%)	0.153
Diabetes, complicated	0 (0%)	11 (1.1%)	0.26
Pulmonary circulation disorders	0 (0%)	8 (0.8%)	0.34
Lymphoma	0 (0%)	6 (0.6%)	0.41
Hypertension, complicated	0 (0%)	7 (0.7%)	0.37
Weight loss	0 (0%)	7 (0.7%)	0.37
Blood-loss anemia	0 (0%)	6 (0.6%)	0.41
Drug abuse	1 (1.8%)	2 (0.2%)	0.135
Dementia	0 (0%)	3 (0.3%)	0.56
Hemiplegia or paraplegia	0 (0%)	2 (0.2%)	0.64
Paralysis	0 (0%)	2 (0.2%)	0.64

Metastatic cancer	1 (1.8%)	1 (0.1%)	0.075
Moderate or severe liver disease	0 (0%)	1 (0.1%)	0.74

\*Unless otherwise noted, n = 1,024 patients. BMI = body mass index, ASA = American Society of Anesthesiologists, STAR = Scandinavian Total Ankle Replacement, AIDS = acquired immunodeficiency syndrome, and HIV = human immunodeficiency virus. †Values are given as the mean and standard deviation or as the number of patients with the percentage in parentheses. ‡A p value of <0.05, given in boldface type, indicates significance.