TABLE E-1 Most Common Medical Comorbid Conditions in the Surgical Groups*

| Comorbid Condition | Sequential (n=26) | Staggered (n=241) | Staged (n=65) | Fisher exact test (p value) |
| :--- | :--- | :--- | :--- | :--- |
| Any comorbidity | $16(61.5 \%)$ | $205(85.1 \%)$ | $57(87.7 \%)$ | 0.012 |
| Atrial fibrillation | $1(3.8 \%)$ | $15(6.2 \%)$ | $3(4.6 \%)$ | 0.921 |
| Prostate hypertrophy | $2(7.7 \%)$ | $15(6.2 \%)$ | $3(4.6 \%)$ | 0.791 |
| Cancer-any type | $0(0 \%)$ | $18(7.5 \%)$ | $4(6.2 \%)$ | 0.490 |
| Coronary artery disease | $0(0 \%)$ | $29(12.0 \%)$ | $9(13.9 \%)$ | 0.114 |
| Depression | $0(0 \%)$ | $10(4.2 \%)$ | $3(4.6 \%)$ | 0.794 |
| Diabetes | $1(3.8 \%)$ | $29(12.0 \%)$ | $9(13.9 \%)$ | 0.440 |
| Deep-vein thrombosis | $1(3.8 \%)$ | $5(2.1 \%)$ | $4(6.2 \%)$ | 0.145 |
| GERD | $0(0 \%)$ | $21(8.7 \%)$ | $4(6.2 \%)$ | 0.353 |
| Hypercholesterolemia | $3(11.5 \%)$ | $50(20.8 \%)$ | $14(21.5 \%)$ | 0.575 |
| Hypertension | $8(30.8 \%)$ | $116(48.1 \%)$ | $41(63.1 \%)$ | 0.014 |
| Obesity | $2(7.7 \%)$ | $35(14.5 \%)$ | $14(21.5 \%)$ | 0.224 |
| Thyroid | $1(3.8 \%)$ | $34(14.1 \%)$ | $10(15.4 \%)$ | 0.341 |
| Valvular heart | $0(0 \%)$ | $9(3.7 \%)$ | $2(3.1 \%)$ | 0.881 |

*The values are given as the number of patients. GERD = gastroesophageal reflux disease.

TABLE E-2 Minor Complications According to the Method of Arthroplasty

| Type of Complication | Staggered | Sequential | Staged |
| :--- | :--- | :--- | :--- |
| Total Minor Complications | $28(12 \%)$ | $9(35 \%)$ | $16(25 \%)$ |
| Cardiac <br> Atrial fibrillation, minor congestive heart failure exacerbation | $4(2 \%)$ | $0(0 \%)$ | $3(5 \%)$ |
| Neurological <br> Confusion, seizure | $3(1 \%)$ | $2(8 \%)$ | $2(3 \%)$ |
| Pulmonary <br> Pneumonia | $2(1 \%)$ | $0(0 \%)$ | $2(3 \%)$ |
| Urinary <br> Retention, urinary tract infection | $7(3 \%)$ | $4(15 \%)$ | $2(3 \%)$ |
| Wound <br> Superficial infection | $3(1 \%)$ | $2(8 \%)$ | $3(5 \%)$ |
| Vascular <br> Deep-vein thrombosis | $2(1 \%)$ | $0(0 \%)$ | $2(3 \%)$ |
| Other <br> Early manipulation, monitored floor admission (non-intensive care unit) | $7(3 \%)$ | $1(4 \%)$ | $2(3 \%)$ |

TABLE E-3 Most Common Medical Comorbid Conditions in Those with and without a Complication

| Comorbid Condition | Patients with Major or Minor <br> Complication (n=61) | Patients with No <br> Complication (n=271) | Fisher exact <br> test (p value) |
| :--- | :--- | :--- | :--- |
| Any comorbidity | $54(88.5 \%)$ | $224(82.7 \%)$ | 0.338 |
| Atrial fibrillation | $3(4.9 \%)$ | $16(5.9 \%)$ | 1.0 |
| Prostate hypertrophy | $4(6.6 \%)$ | $16(5.9 \%)$ | 0.771 |
| Cancer-any type | $4(6.6 \%)$ | $18(6.6 \%)$ | 1.0 |
| Coronary artery disease | $10(16.4 \%)$ | $28(10.3 \%)$ | 0.185 |
| Depression | $0(0 \%)$ | $13(4.8 \%)$ | 0.137 |
| Diabetes | $9(14.8 \%)$ | $30(11.1 \%)$ | 0.388 |
| Deep-vein thrombosis | $4(6.6 \%)$ | $6(2.2 \%)$ | 0.091 |
| GERD | $1(1.6 \%)$ | $24(8.9 \%)$ | 0.060 |
| Hypercholesterolemia | $11(18.0 \%)$ | $56(20.7 \%)$ | 0.726 |
| Hypertension | $28(45.9 \%)$ | $137(50.6 \%)$ | 0.572 |
| Obesity | $9(14.8 \%)$ | $42(15.5 \%)$ | 1.0 |
| Thyroid | $5(8.2 \%)$ | $40(14.8 \%)$ | 0.217 |
| Valvular heart | $3(4.9 \%)$ | $8(3.0 \%)$ | 0.430 |

GERD = gastroesophageal reflux disease.

TABLE E-4 Most Common Medical Comorbid Conditions in Patients with and without a Major Complication

| Comorbid Condition | Patients with Major <br> Complication (n=8) | Patients with No Major <br> Complication (n=324) | Fisher exact <br> test (p value) |
| :--- | :--- | :--- | :--- |
| Any comorbidity | $7(87.5 \%)$ | $271(83.6 \%)$ | 1.0 |
| Atrial fibrillation | $0(0 \%)$ | $19(5.9 \%)$ | 1.0 |
| Prostate hypertrophy | $0(0 \%)$ | $20(6.2 \%)$ | 1.0 |
| Cancer-any type | $0(0 \%)$ | $22(6.8 \%)$ | 1.0 |
| Coronary artery disease | $2(25.0 \%)$ | $36(11.1 \%)$ | 0.230 |
| Depression | $0(0 \%)$ | $13(4.0 \%)$ | 1.0 |
| Diabetes | $1(12.5 \%)$ | $38(11.7 \%)$ | 1.0 |
| Deep-vein thrombosis | $0(0 \%)$ | $10(3.1 \%)$ | 1.0 |
| GERD | $1(12.5 \%)$ | $24(7.4 \%)$ | 0.465 |
| Hypercholesterolemia | $2(25.0 \%)$ | $65(20.1 \%)$ | 0.665 |
| Hypertension | $3(37.5 \%)$ | $162(50.0 \%)$ | 0.723 |
| Obesity | $3(37.5 \%)$ | $48(14.8 \%)$ | 0.109 |
| Thyroid | $0(0 \%)$ | $45(13.9 \%)$ | 0.604 |
| Valvular heart | $1(12.5 \%)$ | $10(3.1 \%)$ | 0.239 |

GERD = gastroesophageal reflux disease.

TABLE E-5 Reimbursement Comparisons by Method of Arthroplasty

|  | Total Reimbursement* | Hospital Reimbursement* | Surgeon Reimbursement* |
| :--- | :--- | :--- | :--- |
| Bilateral sequential | 18042.3 | 14291.85 | 3427.13 |
|  | $(17057.2-25206.8)$ | $(13955.23-19381.15)$ | $(3202.22-5967.08)$ |
| Bilateral staggered | 19790.1 | 15506.42 | 4336.42 |
|  | $(16367.4-29837.7)$ | $(13926.76-25562.70)$ | $(3648.00-4532.07)$ |
| Staged (two admissions) | 22666.6 | 18958.39 | 5481.19 |
|  | $(21146.5-32606.6)$ | $(18020.42-27582.39)$ | $(3210.24-6828.75)$ |

*The table gives the median and the interquartile range, $25^{\text {th }}-75^{\text {th }}$ percentile, for total, hospital, and surgeon cost for each group of patients. All costs have been converted to 2001 dollar values.

