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Appendix

Demographic Characteristics, Comorbidities, and Adverse Events Collected by the ACS-NSQIP

BMI was calculated from height and weight, which are available in the data set. Patients were divided into the following BMI categories: <25 kg/m^2, 25 to 29.9 kg/m^2, 30 to 34.9 kg/m^2, and ≥35 kg/m^2. The ACS-NSQIP also includes information about medical comorbidities, including the ASA class. The ASA classification system is a method for anesthesiologists to assess preoperative risk in patients undergoing a surgical procedure[12]. ASA class 1 indicates "a normal, healthy patient" and ASA class 2 indicates "a patient with mild systemic disease." ASA class ≥3 indicates severe systemic disease. Patients were dichotomized into those with severe systemic disease (ASA class ≥3) and those without severe systemic disease (ASA class <3). Other comorbidities assessed included pulmonary disease (history of dyspnea or severe chronic obstructive pulmonary disease), smoking, congestive heart failure, and diabetes (insulin-dependent diabetes mellitus or non-insulin-dependent diabetes mellitus). Anesthesia type was available and was defined as general or non-general anesthesia. The ACS-NSQIP additionally conducts an interrater reliability audit of participating sites, which have revealed an overall disagreement rate of approximately 2% for all assessed program variables.

A severe adverse event was defined as the occurrence of any of the following: death; coma for >24 hours; ventilator use for >48 hours; unplanned intubation; stroke or cerebrovascular accident; thromboembolic event (deep vein thrombosis or pulmonary embolism); infectious complication (superficial surgical-site infection, deep surgical-site infection, organ/space infection, or sepsis); cardiac arrest; myocardial infarction; acute renal failure; return to the operating room; graft, prosthesis, or flap failure; or peripheral nerve injury. The occurrence of a minor adverse event was defined as wound dehiscence, urinary tract infection, pneumonia, progressive renal insufficiency, or blood transfusion.

TABLE E-1 Significant Risk Factors for Any Adverse Event Following Inpatient and Same-Day Total Hip Arthroplasty, Total Knee Arthroplasty, and Unicompartmental Knee Arthroplasty

Risk Factor	Relative Risk*	P Value
All procedures		
Inpatient		
ASA ≥3	1.62 (1.15 to 2.29)	0.006
Same-day		
Hypertension	1.59 (1.09 to 2.34)	0.017
Pulmonary disease	1.80 (1.06 to 3.06)	0.029
Total hip arthroplasty		
Inpatient		
ASA ≥3	2.07 (1.23 to 3.52)	0.006
Same-day		
No significant risk factors	—	—
Total knee arthroplasty		
Inpatient		
Age of ≥85 years compared <55 years	3.68 (1.60 to 8.44)	0.002
Same-day		
Hypertension	1.90 (1.11 to 3.22)	0.018
Pulmonary disease	2.05 (1.10 to 3.83)	0.024
Unicompartmental knee arthroplasty		
Inpatient		
Hypertension	4.58 (1.10 to 19.11)	0.037
Same-day		
No significant risk factors	—	—

*The values are given as the relative risk, with the 95% CI in parentheses.