

# Medical Device Surveillance and Assessment

## Annual Report

Feature Story:

### **For higher-risk patients, same-day discharge total joint arthroplasty did not increase risk and complications compared with inpatient stay**

In a study published in *The Journal of Bone and Joint Surgery*, Kaiser Permanente Orthopedic Surgeons and Medical Device Surveillance & Assessment Researchers evaluated the risk of 90-day adverse events in higher-risk patients undergoing same-day discharge total joint arthroplasty (TJA) versus inpatient TJA.

*“Prior studies of same day discharge arthroplasty focused primarily on outcomes in young and healthy patients. Our study was the first to show same day discharge could be expanded in a large US health system to include patients with significant disease burdens without compromising quality or increasing returns to care.”*

– Nithin Reddy, MD, Department of Orthopaedic Surgery  
Southern California Permanente Medical Group, San Diego, CA | Study Author

#### Study Details

The cohort included patients with an American Society of Anesthesiologists (ASA) classification of >3 who underwent primary elective TJA for osteoarthritis from 2017 through 2018. There were a total of 5,250 total hip arthroplasty (THA) patients and 9,752 total knee arthroplasty (TKA) patients, with 33.2% and 33.7% same-day discharges, respectively. The risk of 90-day adverse events, including emergency department visits, unplanned readmissions, complications, and mortality was evaluated using of propensity score-weighted Cox proportional hazard regression and noninferiority testing.



- Same-day discharge THA was non inferior to an inpatient stay in terms of emergency department visits, readmissions, and complications; however, there was no evidence of noninferiority for mortality.
- Same-day discharge TKA was non inferior to an inpatient stay in terms of emergency department visits, readmission, complications, and mortality.

#### Practice Consideration

Same-day discharge TJA can be safely expanded for higher-risk patients, including patients with an ASA classification of >3.

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