

Are Same Day Discharges Utilization and Outcome Similar between Outpatient and Inpatient Primary Total Knee Arthroplasty (TKA) Patients?

Nitya Venkat, Justin A Magnuson¹, Peter Aaron Gold, Arjun Saxena, Chad A Krueger

¹Rothman Orthopaedic Institute

INTRODUCTION:

There has been an increased focus on performing safe and effective total knee arthroplasty (TKA) to allow for same day discharge. Thus far, there has not been data distinguishing between outpatient TKA versus inpatient TKA who were eligible for a zero days length of stay (LOS). The purpose of our study is to compare the demographics, complications, and trends in utilization for same day discharge between outpatient and inpatient TKA patients.

METHODS:

We performed a retrospective cohort analysis using American College of Surgeons – National Surgical Quality Improvement Program (ACS-NSQIP) database from 2016-2020 for primary TKA procedures, to compare outpatient and inpatient TKA patients with 0-day LOS. Demographics, comorbidities, length of stay, discharge disposition, and readmissions were analyzed using t tests and chi squared tests.

RESULTS: A total of 50,029 patients were included in the outpatient-billed group and 231,508 patients were included in the inpatient-billed cohort. Age was similar (66.8 vs. 66.7, $p=xx$). BMI (outpatient; 32.3, inpatient; 33.0, $p<0.001$) and ASA status (outpatient; 2.45 inpatient; 2.50, $p<0.001$) were significantly higher for patients in the inpatient care pathway. Average length of inpatient stay was 2.19 days as compared to 0.97 days in the outpatient pathway (<0.001). Inpatients were discharged to non-home settings (acute rehabilitation and skilled nursing facilities) significantly more than outpatients (6.27% vs. 1.61%, <0.001). All-cause readmission was higher in the inpatient cohort (2.86% vs. 2.35%, <0.001). Rate of all other complications did not vary significantly between groups.

DISCUSSION AND CONCLUSION: Although complication rates remain unchanged, we found that discharge to a non-home setting and readmission rates were higher for inpatients who were able to be discharged the same day after TKA. This is important as further distinctions need to be made to better understand the role for same day discharge for inpatient and outpatient TKA patients.