

Predicting Failed Same Day Discharge for Ambulatory Total Hip and Knee Arthroplasty in a Socioeconomically Disparate Community

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INTRODUCTION:

Recognizing risk factors for unforeseen overnight admission (failure to launch; FTL) for total joint arthroplasty (TJA) is essential. Most reports on the efficacy of same day discharge (SDD) are within commercially insured populations from ambulatory surgery centers. Herein we report SDD outcomes from a socioeconomically diverse community within an urban academic medical center.

METHODS:

We retrospectively reviewed consecutive SDD primary TJA patients between July 2020 and December 2021. Patients were excluded if the preoperative plan was inpatient admission. All patients underwent a rapid recovery protocol utilizing premedication, nerve blocks, and short acting spinal anesthesia. Reasons for FTL, demographic and clinical data were collected retrospectively. Differences between the FTL and successful SDD (SSSD) groups were compared by Chi-square and Mann-Whitney U-tests.

RESULTS:

A total of 445 SDD patients were included (142 total hip arthroplasty (THA), 289 total knee arthroplasty (TKA), 14 unicompartmental knee arthroplasty (UKA), mean age 59 years, 270 female). Medicare/Medicaid comprised 54%, and 73% were low socioeconomic status (Low-SES). FTL rate was 38% (169/445) with 94 (56%) due to PT failure and 34 (20%) for medical necessity. The remaining failed for pain, wound drainage, and miscellaneous factors. The FTL rate was higher in females than males (45% vs. 24%; $p < 0.01$) and for BMI ≥ 40 than BMI < 40 (64% vs. 36%; $p < 0.01$). Afternoon surgery completion compared to morning was associated with an increased risk of FTL (51% vs. 31%; $p < 0.01$). No significant difference in FTL was found for low SES, education level, and race or ethnicity, however, the study is underpowered for these variables.

DISCUSSION AND CONCLUSION:

In contrast to prior studies, we report a high FTL, largely due to failure with PT and medical necessity. BMI ≥ 40 , female gender, and afternoon surgery completion are risk factors for FTL.