

Receiving Rehabilitation Services during an Inpatient Stay following Total Joint Arthroplasty: Hospital Related Outcomes and Disparities in Care

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INTRODUCTION: Postoperative physical therapy and rehabilitation protocols are associated with improved outcomes following total joint arthroplasty (TJA). However, optimal practices regarding postoperative rehabilitation practices are still debated. The aim of this study is to assess outcomes associated with receiving in-hospital rehabilitation services following TJA. Secondly, this study will assess characteristics of patients receiving these services.

METHODS: This was a retrospective cohort study utilizing the National Inpatient Sample, years 2016-2020. All patients undergoing inpatient TJA were included. For all patients, we collected demographic information and hospital-related outcomes. Patients who received rehabilitation during their inpatient stay, were identified and compared to those who did not via multivariate regression.

RESULTS: A total of 4,623,496 undergoing TJA were identified. Those receiving rehabilitation services had greater odds of a routine discharge (OR 2.304; $p < 0.001$) and shorter LOS (OR 0.945; $p < 0.001$); however, total charges were greater (OR 1.152; $p < 0.001$). Black patients (OR 1.421; $p < 0.001$), Hispanic patients (OR 1.581; $p < 0.001$), and those in the highest income quartile (OR 1.83; $p < 0.001$) had greater odds of rehabilitation services. Those with Medicaid (OR 0.773; $p = 0.004$) and Medicare (OR 0.678; $p < 0.001$) had reduced odds.

DISCUSSION AND CONCLUSION: Postoperative rehabilitation services improved hospital associated outcomes, with shorter LOS and increased routine discharges. However, disparities in access to these services may exist along a socioeconomic

axis.

