

The Role of a Risk Mitigation Clinic in Total Joint Arthroplasty: A Propensity Matched Analysis

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INTRODUCTION: Total hip and knee arthroplasty (THA/TKA) patients traditionally require risk stratification prior to surgery. Our urban tertiary care center has implemented an anesthesia-operated clinic to evaluate patients for modifiable risks prior to surgery, whose goal is to decrease day of surgery cancellations and ensure patients are optimized for their procedures. Patients were initially evaluated in-person or via telemedicine. But in 2022, the clinic moved to evaluations by chart-review only, without interacting with the patient. We hypothesize that this change did not change post-operative outcomes following THA/TKA.

METHODS: This is an IRB-approved, retrospective propensity matched cohort analysis. We included all patients undergoing THA/TKA for osteoarthritis with two fellowship trained surgeons between January 2021 to December 2022. Electronic medical record was reviewed for demographic information, type of pre-anesthesia clinic visit, peri-operative data. Primary outcomes included length of stay (LOS) and 90-day post-operative complications: inpatient complications, wound complications, emergency department (ED) visits, readmission, and return to OR (RTOR). There were 261 patients who were seen in clinic. A propensity matched cohort of 261 patients getting chart-review only was created, matching for age, gender, body mass index, American Society of Anesthesiologists score, Carlson Comorbidity Index, anesthesia type and surgical time. Significance was set to $p < 0.05$.

RESULTS: There were no significant difference in LOS ($p = .10$), the occurrence of inpatient complications ($p = 1.00$), wound complications ($p = 1.00$), RTOR within 90 day ($p = .453$), ED visit within 90 days ($p = .383$) or readmission within 90 days ($p = .180$) between the two groups.

DISCUSSION AND CONCLUSION:

A chart review only pre-operative risk mitigation assessment does not increase the incidence of 90-day complications following total joint arthroplasty. This ability to perform pre-operative optimization and risk assessment without a physical space and scheduled appointment is important as hospitals allocate physical resources for various services.