

Are We Fulfilling Patient Expectations In Total Joint Arthroplasty? A Review of a Large National Registry

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INTRODUCTION:

Over the last decade, emphasis has been placed on analyzing patient-reported outcome measures (PROMs) using national and statewide data registries. The benefit of registries is to facilitate data collection and analysis of patient outcomes following total joint arthroplasty (TJA) using large samples. This has allowed providers to critically analyze trends, techniques, and even compare their own outcomes to statewide or national averages. The collection of PROMs provides a unique opportunity to investigate and establish a benchmark of various patient experiences following TJA, which may be helpful to patients and providers during preoperative counseling.

Therefore, the goal of this study is to describe fulfillment of patient expectations following TJA using data gathered from a large national database with 119,964 patient responses. We hypothesize that TJA will meet patient expectations more commonly in the primary setting and in older patients.

METHODS:

This is a cross-sectional study using data gathered from 119,964 patient responses across multiple institutions in the United States from the CODE national registry. The primary survey asked patients to provide a rating on a 5 point scale asking if “the results of my surgery have met my expectations”, with 1 equaling “strongly disagree”, 2 equaling “disagree”, 3 equaling “neutral”, 4 equaling “agree”, and 5 equaling “strongly agree”. In addition, patients were surveyed on pain expectations by answering the question “after surgery, pain was better than I expected.” Responses were gathered using the same 5 point scale. Results were further stratified based on total hip arthroplasty (THA), total knee arthroplasty (TKA), primary and revision cases, and age (<50, 50-65, 67-80, and >80 years of age). Surveys on surgical expectations and pain expectations were gathered at the 1 year mark and 10 week mark, respectively, from the date of surgery.

RESULTS:

For primary THA, 90.34% of patients either agreed or strongly agreed that the results of surgery met expectations, and were lowest in patients <50 years at 89.26%. This number decreased to 73.02% in all patients undergoing revision THA (Figure 1). After primary THA, 62.58% of patients agreed that pain was either better or much better than expected, and was lowest in patients <50 years at 61.17%. This number decreased to 54.11% in all patients undergoing revision THA, and was lowest amongst those >80 years at 47.24% (Figure 2). For primary TKA, 83.7% of patients agreed or strongly agreed that the results of surgery met expectations, with those <50 years reporting lowest rates at 77.89%. For revision TKA, this number decreased to 66.0% overall, and was again lowest in patients <50 years at 60.71% (Figure 3). For primary TKA, 39.19% of patients agreed that after surgery, pain was either better or much better than expected. Rates were lowest in those age <50 at 32.61% (Figure 4).

DISCUSSION AND CONCLUSION: In this large nationwide database of 119,964 patient responses, fulfillment of preoperative surgical and pain expectations was higher in both primary and revision THA compared to TKA in all ages. Fulfillment rates were lowest in those aged <50 years undergoing primary and revision TKA. It is important to counsel all patients on the spectrum of postsurgical experiences, especially in patients 50 years or younger undergoing TKA who may experience the lowest fulfillment rates of preoperative expectations.

