

Barriers to Long-Term Orthopaedic Follow-Up Care After Complex and Conversion Total Hip Arthroplasty

William C Walker, Ishani Hiren Deliwala, Alecia Joanne Rajesh, William Riley Davis, Joshua Taylor, Reyanne Nichole Strong, Daniel Whittingslow, Christopher W Olcott

INTRODUCTION: Despite increasing numbers of total hip arthroplasty (THA) procedures being performed each year, many patients fail to return for follow-up beyond the early postoperative period. This is particularly concerning complex and conversion THA cases, which carry greater risk for late complications such as aseptic loosening, wear, and functional decline. Long-term follow-up is essential in detecting adverse outcomes and monitoring implant survivorship, yet significant gaps in care persist. Existing literature rarely addresses the patient-reported barriers that contribute to follow-up attrition in orthopaedic populations. This study aims to identify and describe the barriers to long-term orthopaedic follow-up care in patients who underwent complex THA ≥ 10 years ago or conversion THA ≥ 5 years ago, incorporating comorbidity and community-level factors.

METHODS: This is a retrospective cohort study with prospective survey follow-up. Eligible patients who underwent complex or conversion THA were identified through medical records and contacted to participate. Participants were asked to complete a evidence-based Barriers to Follow-up Survey, reporting obstacles that prevented them from returning for long-term orthopaedic evaluation. Survey options included logistical, socioeconomic, medical, and psychological barriers. Additionally, data on each patient's Charlson Comorbidity Index (CCI) and Distressed Community Index (DCI) were collected to evaluate the association between health status, community vulnerability, and reported barriers to care. All survey and demographic data were collected and stored in a secure database. Descriptive and comparative statistics were used to quantify barrier prevalence and evaluate associations with comorbidity and socioeconomic indicators.

RESULTS:

A total of 58 patients completed the Barriers to Follow-up Survey. The most frequently reported reason for not returning to orthopaedic clinic was the absence of hip-related symptoms (33.8%), followed by logistical challenges such as transportation difficulties (16.9%), time constraints (15.5%), and distance from clinic (14.1%). Other commonly endorsed reasons included personal illness or other medical conditions (11.3%) and belief that symptoms would improve without intervention (11.3%). The mean Charlson Comorbidity Index (CCI) was 2.46 ± 1.87 and the mean Distressed Community Index (DCI) was 45.43 ± 25.25 .

When stratified by surgery type (complex vs. conversion THA), none of the barriers showed statistically significant differences (all $p > 0.18$). Similarly, subgroup analyses based on CCI (high vs. low, threshold = 2.46) and DCI (high vs. low, threshold = 45.43) revealed no statistically significant associations with reported barriers (all $p > 0.1$), though distance approached significance in the DCI analysis ($p = 0.0978$). Barriers related to insurance status, childcare, and language were rarely endorsed. No comparisons reached statistical significance after correction for multiple testing.

DISCUSSION AND CONCLUSION:

In this cohort of patients who underwent complex or conversion total hip arthroplasty (THA), lack of perceived need for follow-up was the most cited barrier to long-term orthopaedic care. Contrary to expectations, traditional social determinants such as cost, insurance status, or comorbidity burden were not significantly associated with follow-up attrition. Instead, symptom-driven reasoning—such as the absence of hip complaints or belief in spontaneous improvement—emerged as key contributors.

While no statistically significant differences in barrier prevalence were observed between surgery types, or across strata of CCI and DCI, subtle trends suggest that patients facing geographic or logistical challenges (e.g., distance from care) may still be vulnerable to disengagement, particularly in distressed communities. The absence of statistical signal may reflect the relatively small sample size and underpowering of subgroup analyses.

These findings highlight the interplay between perceived need, health literacy, and access in determining follow-up behavior. As long-term surveillance remains critical for identifying implant-related complications and guiding patient care, targeted interventions that address symptom perception and education may be necessary. Future work should validate these findings in a larger population and explore mechanisms to improve patient engagement in long-term arthroplasty follow-up.

Reported Barriers to Long-Term Orthopaedic Follow-Up

