

Only 5% of Hip PJIs Are Treated by High-Volume Surgeons: Implications for PJI Centers in the US

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INTRODUCTION: There has been recent interest in developing periprosthetic joint infection (PJI) centers of excellence in the United States (US). However, little is known regarding the current distribution of surgical management of total hip arthroplasty (THA) PJIs in the US. The purpose of this study was to utilize the American Joint Replacement Registry (AJRR) to evaluate the surgical volume of surgeons and institutions caring for PJI of the hip.

METHODS: The AJRR was utilized to evaluate all THAs performed between 2012 – 2022. This resulted in 1,157,938 primary and revision THAs performed in 1351 institutions by 7390 surgeons. Among the 128,339 revision THAs included, 24,506 (19%) were for PJI. A high-volume hip PJI surgeon was defined as >11 hip PJI procedures/year and a high-volume hip PJI institution was defined as > 25 hip PJI procedures/year.

RESULTS: The median annual hip PJI volume/institution was 3 PJIs (range, 1 – 66) and median annual hip PJI volume/surgeon was 1 PJI (range, 1 – 19). Thirty-eight percent of hip PJI procedures were performed by surgeons who did 2 or less of these operations annually, and 42% occurred at hospitals that care for 7 or less hip PJIs annually. In total, only 5% of hip PJI procedures were performed by high-volume hip PJI surgeons, and 17% were performed at high-volume hip PJI institutions. In 2022, 4% of hip PJI procedures were performed by high-volume PJI surgeons and 15% at high-volume PJI institutions.

DISCUSSION AND CONCLUSION: In the US, only 5% of hip PJI were managed by “high-volume” PJI surgeon and only 17% at “high-volume” institutions. As such, establishing PJI centers of excellence would likely inhibit access for our most critical patients as a 6-fold increase in PJI volume is not solvent from a financial, physical, mental, or emotional perspective.