

# Optimization Strategies of Adult Reconstructive Surgeons for Patients with Obesity Undergoing Total Hip and Knee Arthroplasty: A National Survey

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INTRODUCTION: Research on optimizing patients with obesity (BMI >30 kg/m<sup>2</sup>) before elective total joint arthroplasty (TJA) is limited. This study aims to provide a national overview of current optimization strategies used by arthroplasty surgeons.

## METHODS:

A confidential, voluntary 24-question online survey was distributed to the orthopedic community via professional mailing lists and social media. Developed by a multidisciplinary team of surgeons, the survey assessed practices in managing patients with obesity undergoing TJA. Conducted from 04/16/2024 to 05/28/2024, responses were reported as percentages.

RESULTS: Among 470 responses, 82.98% (n=390) were adult reconstruction (AR) fellowship trained, 11.49% (n=54) were not, and 5.53% (n=26) had fellowship training in another specialty. In terms of practice settings, 27.72% (n=130) were in small private practices, 26.65% (n=125) were hospital-employed, 21.32% (n=100) were at academic university medical centers, and 19.40% (n=91) were at private large multi-specialty practices. For total hip arthroplasty (THA), 3.84% (n=18) of respondents indicated BMI cutoffs < 35 kg/m<sup>2</sup>, 45.63% (n=214) < 40 kg/m<sup>2</sup>, 19.83% (n=93) < 45 kg/m<sup>2</sup>, 7.46% (n=35) < 50 kg/m<sup>2</sup>, and 23.24% (n=109) had no strict cutoff. For total knee arthroplasty (TKA), 2.14% (n=10) indicated BMI cutoffs < 35 kg/m<sup>2</sup>, 42.74% (n=200) < 40 kg/m<sup>2</sup>, 24.15% (n=113) < 45 kg/m<sup>2</sup>, 7.26% (n=34) < 50 kg/m<sup>2</sup>, and 23.72% (n=111) had no strict cutoff. For patients who received bariatric weight loss surgery, 2.13% (n=10) of respondents recommended waiting periods of less than 1 month prior to TJA, 19.19% (n=90) recommended 3 months, 42.00% (n=197) recommended 6 months, 22.60% (n=106) recommended 1 year, 3.62% (n=17) recommended greater than 1 year, and 10.45% (n=49) selected other.

DISCUSSION AND CONCLUSION: Our survey provides a national overview of current optimization strategies for managing patients with obesity undergoing elective TJA. The data highlight varying BMI cutoffs and recommended waiting periods post-bariatric surgery, reflecting diverse practices among arthroplasty surgeons.

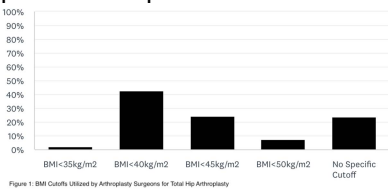


Figure 1: BMI Cutoffs Utilized by Arthroplasty Surgeons for Total Hip Arthroplasty

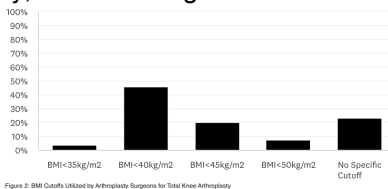


Figure 2: BMI Cutoffs Utilized by Arthroplasty Surgeons for Total Knee Arthroplasty

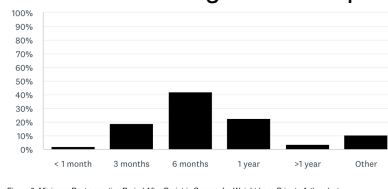


Figure 3: Minimum Post-operative Period After Bariatric Surgery for Weight Loss Prior to Arthroplasty