

## What Matters Most to Patients: Determinants of Perceived Recovery Following Shoulder Surgery

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### ABSTRACT

**Background:** The American Shoulder and Elbow Surgeons (ASES) score is a well-established patient-reported outcome measure used to assess pain and functional limitations in patients with shoulder pathology. While it captures key domains such as pain and activities of daily living, limited research has examined which individual factors patients prioritize most when determining their own recovery or deciding to pursue surgery. The purpose of this study was to evaluate which specific domains including pain, driving, sleep, and self-care most influence a patient's decision to undergo shoulder surgery and their subjective sense of recovery. The study also aimed to identify how these priorities vary based on demographic characteristics. Improved understanding of patient preferences may allow shoulder surgeons to provide more personalized counseling and better align treatment goals with individual expectations.

**Methods:** An anonymous cross-sectional survey was administered to adult participants at various public locations in Palm Beach County, Florida between May and December of the study year. The survey collected demographic information and assessed the relative importance of five domains: pain, shoulder function, sleep, driving, and self-care activities. These domains were evaluated in two contexts: the decision to undergo shoulder surgery and the subjective feeling of recovery after surgery. Participants also ranked a set of specific activities of daily living and provided estimated recovery times for sleep, driving, and self-care. Descriptive statistics and multivariate logistic regression were used to determine which demographic factors were associated with the likelihood of considering surgery and with prioritization of functional domains in decision-making and recovery.

**Results:** The cohort included 101 participants with a mean age of 38.7 years; 51.4 percent identified as male and 68.2 percent as Caucasian. When asked about factors influencing the decision to undergo shoulder surgery, shoulder pain was the most influential factor in the decision to undergo surgery, ranked first by 45.8 percent of participants, followed by impaired ability to perform self-care (20.6 percent), decreased function (14.0 percent), difficulty driving (10.3 percent), and difficulty sleeping (9.3 percent). When defining recovery, alleviation of pain remained the top priority (48.6 percent), followed by self-care (20.6 percent), shoulder function (12.1 percent), sleep (10.3 percent), and driving (8.4 percent). Sleeping on the affected side (73.8 percent), toileting (67.3 percent), driving (60.7 percent), and returning to work (78.5 percent) were the most frequently ranked activities in participants' top five for feeling recovered. Multivariate analysis revealed that female gender, Black and Asian race, and English as a first language were independently associated with lower likelihood of considering surgery. Income greater than \$100,000 dollars and ranking driving as the most important factor were associated with increased surgical consideration. Black participants were more likely to prioritize pain relief, while being married and having greater confidence in completing medical forms were associated with decreased prioritization of pain as the primary factor.

**Conclusion:** Pain remains the most important factor in patients' perception of recovery after shoulder surgery, but the ability to perform daily activities, sleep comfortably, and drive also significantly influence this perception. Black and Asian race, female gender, and lower income were associated with reduced likelihood of pursuing surgery, whereas higher income and prioritizing driving were linked to greater surgical consideration. These findings underscore the importance of personalized counseling that addresses what patients value most—particularly pain relief, independence in self-care, and driving. By setting realistic expectations around recovery timelines in these areas, shoulder surgeons can better support shared decision-making and improve patient satisfaction with surgical outcomes.