

## **Patient Perceptions on Defining High Quality Orthopedic Care Based on Patient Reported Outcomes**

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**INTRODUCTION:** Efforts to advance patient-centric health care include measurement of patient-reported outcome measures (PROMs) as part of care delivery and increasingly to assess quality. However, little is known about the types, intensity or frequencies of outcomes that are important to patients when assessing health care quality. The purpose of this study was to delineate patient perceptions of these constructs to inform a framework for PROM-based quality measurement and reporting.

### **METHODS:**

At the direction of the study team, National Research Corporation Health conducted an online survey of general consumers age 18+ in the US who had knee replacement, hip replacement, neck or spine surgery, between 6 months and 4 years before the survey date, using the 'patient perceptions of PROM-based quality' survey, which was previously developed by the investigators. Surveys were fielded February 8-16, 2024. All recipients were given the option to opt out of the study.

Participants were questioned about their perceptions of surgical quality including 1) at which degree of improvement they would consider the care to have been high quality; 2) if they would consider care to have been high quality if a patient acceptable symptom state (PASS) was achieved; and 3) the importance of this information when choosing a hospital or surgeon for joint replacement surgery. Cross-tabulations, chi-squared analyses, and t-tests were conducted to understand survey response trends, subgroup differences.

### **RESULTS:**

1000 respondents completed the survey with an overall standard error range  $\pm 3.1\%$  at a 95% confidence level. Characteristics of the respondents are detailed in Table 1.

Overall, 53% of respondents believe a patient needs to be very much improved one year after surgery to say that the surgical and follow-up care was high quality, 41% believe a patient needs to be much improved, with little difference across types of surgery (Figure 1).

Among respondents who defined high quality as 'very much improved,' the mean percentage of prior patients that would be needed to achieve this degree to consider a hospital or surgeon as high quality was 82%; it was 76% among respondents who defined high quality as at least 'much improved.' On average, subjects rated the usefulness of this information in choosing a surgeon or hospital as 81 (median 87) on a 101-point scale where 100 = very useful and 0 = not useful at all.

Overall, 85% of respondents would consider a surgery to be high quality if someone said their current health state was satisfactory one year after the surgery, with little difference across type of surgery (Figure 2).

For respondents to consider a hospital or surgeon to be "high quality", the mean amongst all respondents was 80% when asked what percentage of past patients would they want to answer that "Yes, my current health state is satisfactory" one year later? On average, subjects rated the usefulness of this information in choosing a surgeon or hospital as 81 (median 86) on a 101-point scale where 100 = very useful and 0 = not useful at all.

**DISCUSSION AND CONCLUSION:** Respondents in this sample consider the quality of care provided by a hospital or surgeon for knee replacement, hip replacement, neck or spine surgery to be high if the vast majority of prior patients were at least much improved or achieved a PASS one year after the procedure and regard this information as very important in choosing providers. These findings suggest that routine PROM-based quality measurement anchored on improvement and/or achieving a PASS reflect constructs that are important to patients.

Figure 1. Proportion of respondents who would consider surgery to be 'high quality' by degree of improvement one year after surgery and stratified by type of prior surgery.

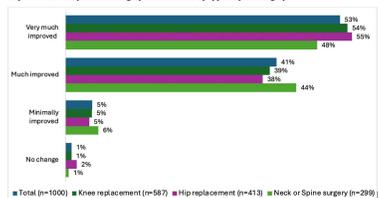


Figure 2. Proportion of respondents who would consider surgery to be 'high quality' if a patient reported a satisfactory symptom state (PASS) one year after surgery (yes) or did not (no) by type of surgery.

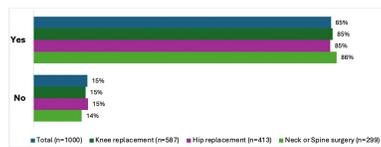


Table 1. Characteristics of respondents.

	Number	Proportion
<b>Gender</b>		
Male	340	34%
Female	660	66%
<b>Age group (years)</b>		
18-25	10	1%
26-34	50	5%
35-44	90	9%
45-54	100	10%
55-64	250	25%
65-74	350	35%
75+	160	16%
<b>Race/ethnicity</b>		
American Indian or Alaska Native	30	3%
Asian	10	1%
Black or African American	80	8%
Hispanic, Latino or Spanish	40	4%
White	880	88%
<b>Type of health insurance</b>		
Medicare or Medicaid	660	66%
Veterans Administration or military	40	4%
Private insurance	290	29%
No insurance	10	1%
<b>Household income (USD)</b>		
Under 25,000	160	16%
25,000-49,999	300	30%
50,000-74,999	250	25%
75,000-99,999	120	12%
100,000-124,999	60	6%
125,000-149,000	40	4%
150,000 or more	50	5%
Declined to answer	30	3%